

2002 Imperial County Transportation Plan Highway Element



Final Report
November 2002

This report was prepared by the California Department of Transportation (Caltrans) District 11, Transportation Planning Branch on behalf of the Imperial Valley Association of Governments and the Technical Advisory Committee.

2002 IMPERIAL COUNTY TRANSPORTATION PLAN

HIGHWAY ELEMENT

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EXECUTIVE SUMMARY

In 1990 the Southern California Association of Governments (SCAG), Imperial Valley Association of Governments (IVAG), and Caltrans developed the 1990 Imperial County Transportation Plan. This plan was the first of its' kind for the Imperial Valley region. The 1990 plan addressed transportation deficiencies and developed near-term, mid-term and long-term projects and strategies for improving and maintaining the State highway system. In 1997, the Highway Element of the 1990 Transportation Plan was updated to address State highway improvement projects necessary for Imperial County. The 1997 Highway Element identified over 17 such projects that built on improvements identified in the 1990 Transportation Plan.

The 2002 Transportation Plan

The 2002 Transportation Plan is an update of the 1997 Plan that takes into account changes in land use development, population, and State highway usage. The plan articulates support for current transportation improvement commitments and establishes the foundation for future transportation funding decisions by proposing a set of transportation priorities that could be considered if new funding is obtained. These priorities are intended to meet and respond to the unique and distinctive transportation characteristics of Imperial County that were developed through a comprehensive and cooperative planning approach between local, regional, and state officials. The basis for addressing the region's particular needs is based on one mission statement:

*Maintain and improve mobility for people and goods to enhance the quality of life
and economic vitality of Imperial County*

Supported by seven goals, the mission statement sets a vision for the region's transportation future, a vision that promotes and pursues practical and critical transportation choices for the years 2002 through 2022 and beyond.

2002 Transportation Plan Components

The 2002 Transportation Plan only focuses on Imperial County's Highway network, and draws upon previous efforts undertaken during the development of the 1997 Plan - Highway Element, as well as contemplating new and creative ideas for improving the mobility and safety of Imperial County's residents, visitors, and businesses. The plan is organized into six chapters, as outlined below. This executive summary presents key background, transportation priority findings, and other fundamental information offered in the 2002 Transportation Plan.

2002 Transportation Plan highlights include:

- **The Region** – Imperial County is located in the southeast portion of the State of California, sharing boundaries with San Diego County to the west, Riverside County to the north, the State of Arizona to the east, and Mexico to the south. Imperial County has seven incorporated cities with an estimated total population of 142,361 in 2000. Total population is projected to increase by 50 percent (214,497) by 2010 and by 94 percent (277,453) by 2020 based on estimates provided by SCAG.

Imperial County is among the top agricultural producing regions in the State. Agriculture and related industries are an integral component of the regions' economic base. In 2000, the value of agricultural production totaled \$920 million and ranked 11th in the State. Government, agriculture, and trade related industries are the leading employers and represent approximately 71 percent of total employment in the region.

- **Transportation Trends** – The regional transportation network as described in this plan consists of one Interstate route, seven State Routes, and nine regional arterials. This network provides transportation connectivity for key and unique trips that are critical to the well being of the region's economy. These trips include the movement of agricultural goods, the movement of cross-border goods and services, and recreational travel. Efficient and safe travel along this network is particularly important as the Calexico East, and Calexico Downtown Ports of Entry (POE) are located in this region.

These international POEs service the second highest number of border crossings in California associated with commercial trucks and passenger vehicle crossings. In Federal FY 2002, approximately 540,000 trucks crossed at the Calexico East POE. Also in that year, data indicated that approximately 18.4 million passenger vehicles crossed at the Downtown Calexico POE. Because of the region's reliance on this network and its geographic location, improvement and expansion of these facilities are critical to the regional, local, state, and national economy.

- **2002 Transportation Plan Project Improvements** - The 2002 Transportation Plan identifies 23 projects that are consistent with and enhance the transportation planning principles articulated in the 1997 Transportation Plan. The proposed improvements included in the 2002 Transportation Plan are presented in five spending priority categories: Near Term Project Commitments (2002 – 2012), Near Mid Term Projects, Mid Term Projects (2012-2022), Mid Long Term Projects, and Long Term Projects (Beyond 2022). Through the project timeframes, the 2002 Transportation Plan ensures that priority is given

to currently funded projects, and to those improvements that were added to this category. These projects, recognized as Near Term Project Commitments, total between \$342.6-\$352.3 million of which approximately \$176 million is already programmed. The Near Term Project Commitments are described below. All of the 23 projects identified in the 2002 Plan are illustrated in Table 6-1, and Figures 6-1, 6-1A, and 6-2 of the report.

- **Revenues and Costs** - After looking at revenue projections based on SCAG's 2001 Regional Transportation Plan (RTP) figures (estimated at \$8.5 million per year – 2001 through 2025), and based on historical funding trends (primary funding source are State Transportation Improvement Program – STIP-revenues), it is estimated that approximately \$205.7 million will be available for the region over the 20 year period of the 2002 Transportation Plan. After fully funding the estimated shortfalls of the Near Term Project Commitments currently estimated between \$166.3 - \$176.0 million, the region will be left with approximately \$31.8 to \$36 million that could be assigned to additional future transportation investments.

2002 Imperial County Transportation Plan Near Term Project Commitments			
Project	Project Cost (Millions)	Programmed Funds (Millions)	Estimated Shortfall
SR-7 Extension from SR-98 to I-8	\$64.3	\$64.3	\$0.0
I-8/Imperial Avenue Interchange Improvements	\$23.0	\$7.5	\$15.5
SR-98 Corridor Improvements			
• Widening and Realignment (SR-7 to SR-111)	• \$90.0	• \$12.5	• \$77.5
• Widening west of SR-111, signalization	• \$9.0	• \$2.0	• \$7.0
SR-78/Brawley Bypass Construct four lane expressway	\$108.0	\$90.0	\$18.0
SR-115 Construct four lane extension (I-8 to Evan Hewes Highway)	\$48.0 -\$55.0	\$0.0	\$48.0-\$55.0
SR-78 Access Improvements for future SDSU Campus in Brawley	\$.25-\$3.0	\$0.0	\$.25-\$3.0
Total	\$342.6-\$352.3	\$176.30	\$166.3-\$176.0

Transportation Plan Chapters:

- Chapter 1 - Introduction – This chapter provides an overview of Imperial County’s demographic and socioeconomic characteristics. Also included are key transportation related statistics associated with the region’s POE crossings, and international travel influence.
- Chapter 2 - Transportation Infrastructure Conditions – This chapter provides an overview of the current and anticipated highway system conditions. The chapter provides Level of Service (LOS) and Average Daily Traffic (ADT) data for all highway segments. The chapter also provides an overview of key regional arterial segments that are critical to the region’s mobility and complement the highway system.
- Chapter 3 - Goods Movement – This chapter identifies key issues associated with the movement of goods and cross-border trade in order to address current and future transportation infrastructure deficiencies.
- Chapter 4 - Financial Assumptions – This chapter briefly defines Imperial County’s financial picture associated with current and future transportation improvements. It describes the financial outlook considered in developing the 2002 Transportation Plan and underlying assumptions based on SCAG’s 2001 RTP revenue projections.
- Chapter 5 - Methodology – The chapter highlights key activities carried out during the development of the 2002 Transportation Plan. Such fundamental and critical efforts included holding public workshops and developing project evaluation criteria.
- Chapter 6 - 2002 Transportation Plan Project Improvements – Chapter 6 identifies the region’s transportation improvement priorities that ensure safe and efficient mobility for Imperial County’s highway network. These 23 projects are listed in a five tier funding structure, which moves projects forward in priority should additional funding (i.e., Reauthorization of TEA 21, Coordinated Border Infrastructure Program, etc.) become available. The projects are set within three time frames that extend from 2002-2012, 2012-2022, and 2022 and beyond.

In all, the 2002 Transportation Plan devotes attention to transportation improvements associated with maintaining and improving mobility along a set of specific corridors. These corridors are deemed critical to improving east-west and north-south movement for intra-county travel associated with agricultural and recreational related movement, as well as interregional, interstate, and international travel. Improving mobility along these corridors provides a comprehensive approach for addressing the unique transportation characteristics of the region and reaffirms the region's commitment to maintaining efficient and safe mobility of agricultural and cross-border goods and services as well as recreational travel.

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CHAPTER 1 – INTRODUCTION

BACKGROUND

Need for the 2002 Transportation Plan

This document provides an update to Imperial County's 1997 Transportation Plan that was approved by the IVAG Regional Council in February 1997. This 2002 Transportation Plan update devotes attention to addressing transportation deficiencies and developing prioritized transportation strategies and projects for improving the Highway Network of Imperial County. This transportation plan update articulates a vision for Imperial County's transportation future that meets and responds to the unique and distinctive characteristics of the area's residents, businesses, and valley.

The 2002 Transportation Plan update accounts for changes in land use development, population, and State highway usage. The plan will provide input into SCAG's RTP update, which is expected in 2004. With an eye toward continuity, this plan update revisited the priorities developed in the 1997 Transportation Plan, and updated them to reflect new or changed circumstances including ever-increasing cross-border traffic, estimated population growth, and new or changed funding policies and resources.

The 2002 Transportation Plan update formalizes the commitment of IVAG, the California Department of Transportation (Caltrans), and SCAG to sustaining and improving Imperial County's transportation network.

Scope of Work

The Scope of Work efforts carried out during the development of the 2002 Transportation Plan draws from previous tasks undertaken during the development of the 1997 Transportation Plan. The Scope of Work was approved by the IVAG 2002 Transportation Plan Technical Advisory Committee (TAC) in May of 2001.

The 1997 Transportation Plan addressed improvements to Interstate and State routes; and other transportation needs such as transit, rail, and non-motorized travel were addressed separately in documents such as the 1998 Imperial County Transportation Plan Rail Vision, and the Regional Arterial Plan. Similarly, the 2002 Plan only focuses on Imperial County's Highway Network, and identifies transportation project improvements that build on improving the mobility of people and goods, and improving the economic vitality of Imperial County. Many of these projects are fundamental in nature by focusing on infrastructure improvements that serve interregional and intra-regional, interstate, and international travel.

Improvements to transit, rail, and non-motorized modes will be articulated through the development of a Non-Highway Transportation Plan and will be completed in subsequent efforts.

The plan is organized into six chapters of which this is Chapter 1 – Introduction. The remaining chapters cover several subject areas ranging from documenting existing transportation and demographic conditions to outlining and prioritizing transportation investment needs for Imperial County. The plan and its recommendations reflect a collective and consensus planning approach for improving the mobility and safety of Imperial County’s highway transportation network.

The Technical Advisory Committee

In developing the 2002 Transportation Plan, the first step involved the formation of a TAC to provide oversight throughout the development of the plan. The TAC worked with Caltrans and SCAG under the direction of the IVAG Regional Council and provided general oversight and guidance including the review of all work products, and assistance in identifying transportation deficiencies and improvements.

TAC membership included County and City representatives, and representatives from other governmental agencies as well as the private industry. Caltrans staff served in an advisory capacity, provided staff support to the TAC meetings, and prepared the Draft and Final Reports. A TAC membership list is included in Appendix A.

Adoption of Plan

On June 26, 2002, the Final Draft Transportation Plan was presented to the IVAG Regional Council by the TAC. On September 26, 2002, the Final Draft was presented and approved by the IVAG Regional Council. The approved plan will be forwarded to SCAG for inclusion into their RTP update, which will be undertaken in 2004.

Mission Statement and Goals

The 2002 Transportation Plan is a 20 year plan that articulates Imperial County’s transportation challenges and provides the basis for the development of a long-range transportation vision specific to the unique characteristics of Imperial Valley’s residents, visitors, economy, and businesses.

This 20 year vision is based on the following mission statement and seven goals established and approved by the 1997 Imperial County Transportation Technical Advisory Committee:

Mission Statement

Maintain and improve mobility for people and goods to enhance the quality of life and economic vitality of Imperial County.

Goals

1. Promote transportation strategies that support and encourage the economic vitality of Imperial County.
2. Ensure that Imperial County receives their fair share of Federal, State, and private transportation funding and seek additional monetary provisions for mitigating transportation impacts associated with General Agreement on Trade and Tariffs (GATT) and North America Free Trade Agreement (NAFTA).
3. Balance regional transportation strategies (e.g. highways, transit, rail and aviation) with the varied needs of cities and smaller communities within Imperial County.
4. Identify transportation strategies that meet the mobility needs of all segments of the community.
5. Address future transportation capacity and operational needs in Imperial County.
6. Determine strategies that promote public safety and maintenance of the transportation system.
7. Identify strategies for improving freight and passenger rail in Imperial County.

REGIONAL SETTING

Imperial County encompasses over 4,500 square miles and lies in the southeast portion of the State of California. It is bordered by San Diego County to the west, Riverside County to the north, and the State of Arizona to the east. Located along the international border, the region shares 84 miles with Mexico to the south (see Figure 1-1).

The terrain varies from arid desert to barren mountains, and normally experiences temperatures ranging from the low 30's to over 100 degrees. Its soil is one of the most fertile for agricultural crops and water is provided via an extensive irrigation system established in the early 1900s. Because of this, and the extended growing season allowed by the climate, the region is considered one of California's leading agricultural producers in the State. Imperial County's agricultural production gross revenue totaled approximately \$920 million in 2000.

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Demographic and Socioeconomic Characteristics

According to the U.S. Census Bureau, the County's population totaled 142,361 in 2000 representing an increase of 30 percent over 1990 census data. As the County continues to grow, SCAG's forecast suggests that the County will reach a population of 214,497 by 2010, and 277,453 by 2020. SCAG projections show that major growth will continue to occur within the seven incorporated cities which are Brawley, Calexico, Calipatria, Holtville, Imperial, Westmorland, and El Centro. El Centro currently holds the largest population of 37,835 and is also the County seat. Table 1-1 presents 2000 and projected (2010 and 2020) population and household statistics for Imperial County.

Employment statistics indicate that the three highest employment sectors for Imperial County are government, agriculture, and retail trade related industries. It is estimated that government, agriculture, and retail trade represent approximately 71 percent of Imperial County's total employment. Specifically, government is the largest industry with approximately 31 percent of total employment. The agriculture industry is the second highest sector and represents 23 percent of total employment, followed by retail related industry with approximately 17 percent. Furthermore, employment statistics indicate that retail trade is expected to increase by 12 percent and is recognized as the sector with the highest projected growth between 1997 – 2004. According to SCAG projections, total County employment is projected to increase by 11 percent (82,791) by 2010 and by 20 percent (90,267) by 2020 over 2000 data (74,546). The 2000 workforce breakdown estimated by the California Employment Development Department for Imperial County is provided in Figure 1-2.

As indicated previously, the region's climate and extensive irrigation system makes Imperial County one of the leading agricultural producers in the State. Agriculture and its related industries are an integral component of the region's economic base. According to agricultural figures provided by the Imperial County Farm Bureau, Imperial ranked 11th in the State with approximately \$920 million in total value of agricultural production. The top five agricultural related products by value (millions) are cattle (\$158.6), alfalfa (\$121.5), lettuce (\$78.9), carrots (\$55.7), and sugar beets (\$45.0). The movement of agricultural goods relies heavily on the local and State transportation system. The conditions of these facilities are, and will continue to be, a key factor for preserving the region's agricultural dominance in the region and State.

In addition to the thriving agricultural industry, Imperial County also provides recreational activities year round due to its natural beauty and distinct environmental region which extends from the Yuha Basin in the west to the Colorado River in the east. Some of the major recreational activities include off-roading, which can attract over 50,000 weekend visitors, and overnight camping

which draws thousands from colder climates in other states and Canada during the Valley's warm winters. To the north, wildlife enthusiasts frequent the Salton Sea recreational area, home to many different species of migratory birds.

TABLE 1-1
Imperial County Demographics

City	Total Population			Total Housing Units		
	2000 ¹	2010	2020	2000	2010	2020
Brawley	22,052	27,515	32,732	6,848	8,503	10,631
Calexico	27,109	37,727	47,320	6,675	8,428	10,684
Calipatria	7,289	8,724	9,639	940	1,350	1,611
El Centro	37,835	40,407	42,775	11,301	12,073	13,070
Holtville	5,612	6,962	8,080	1,594	2,010	2,395
Imperial	7,560	13,742	19,429	2,651	4,289	6,397
Westmorland	2,131	2,584	3,247	513	762	1,003
Unincorporated Area	32,773	76,836	114,231	11,879	23,125	37,603
Total	142,361	214,497	277,453	42,401	60,540	83,394

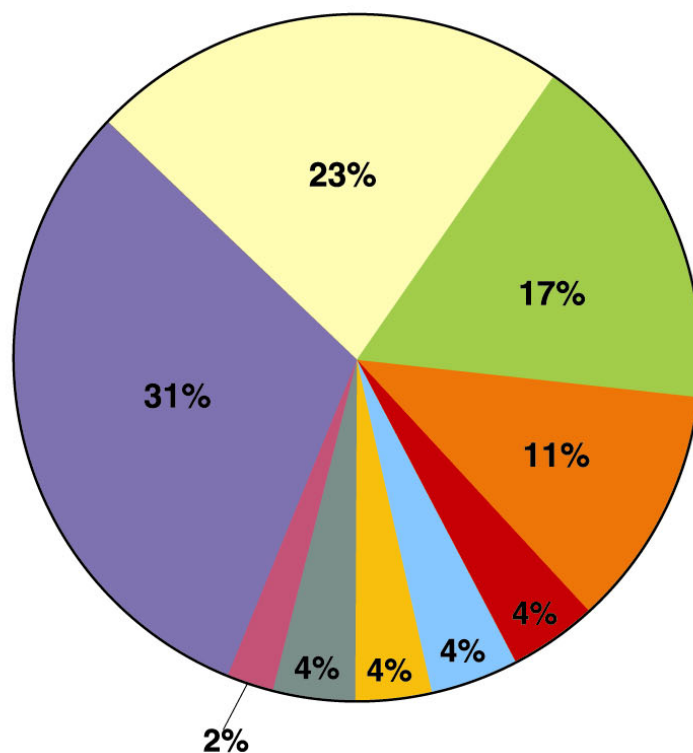
Source:










¹ - U.S. Census Bureau, Census 2000

All other Figures - Southern California Association of Governments

2002 Imperial County Transportation Plan

FIGURE 1-2
Average Employment Breakdown for 2000



Industry	Percent Breakdown
 Government	31 %
 Agriculture	23 %
 Retail Trade	17 %
 Services	11 %
 Wholesale Trade	4 %
 Construction & Mining	4 %
 Manufacturing	4 %
 Transportation & Public Utilities	4 %
 Finance, Insurance & Real Estate	2 %

Source: California Employment Development Department, 2000

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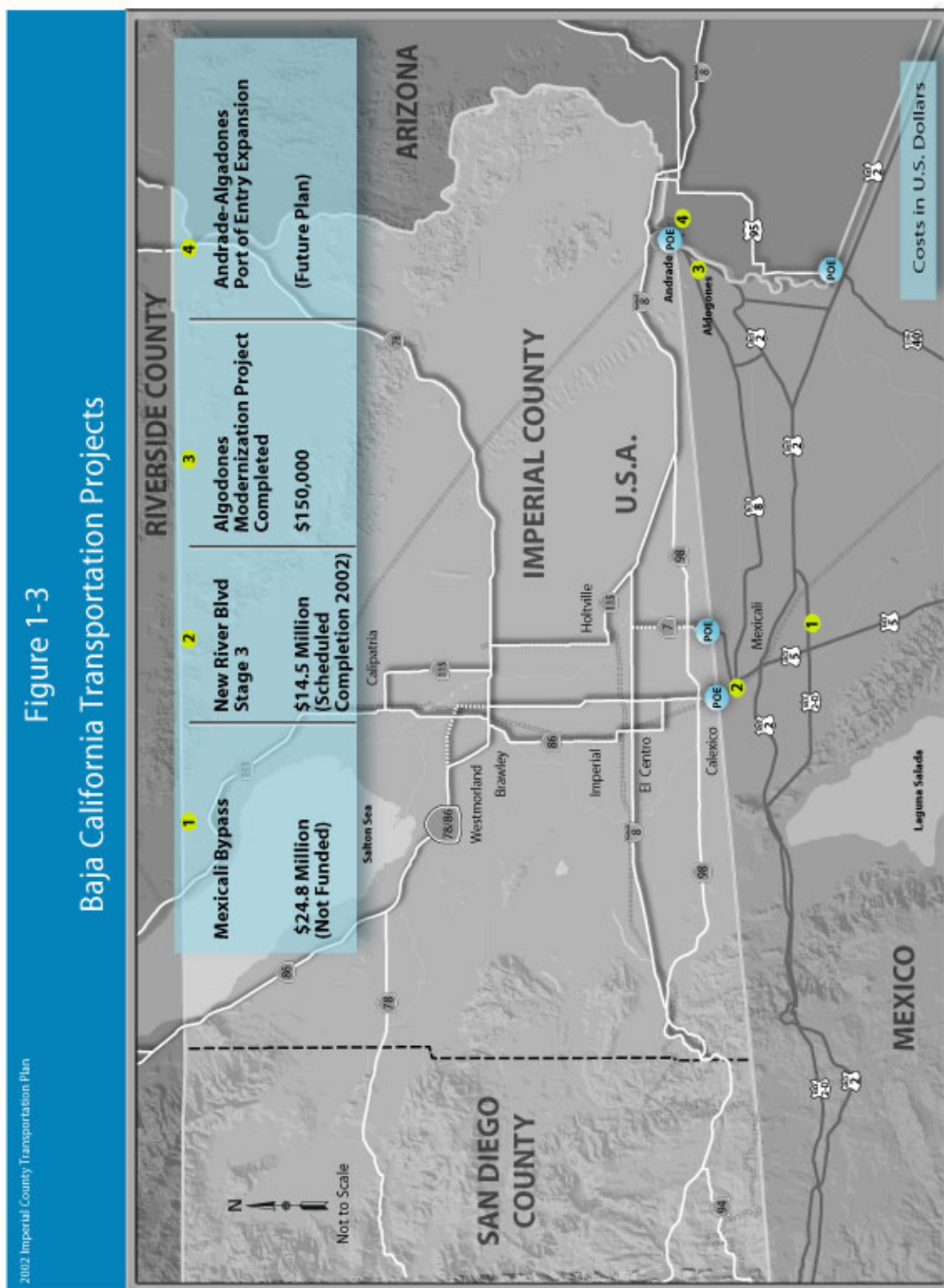
International Influence

In addition to its regional economic characteristics, Imperial County is also influenced by its close proximity to the Republic of Mexico. The municipality of Mexicali is Imperial County's neighbor to the south and serves as the State capital for Baja California Norte. Mexicali has an approximate land area of 5,300 square miles with an estimated population of 765,000 (2000). According the Instituto Nacional De Estadistica Geografia E Informatica (INEGI, Mexican Agency responsible for integrating Mexico's system of statistical and geographic information), the municipality of Mexicali is projected to grow to about 925,000 by 2010 representing a 20 percent increase over 2000 data.

The largest employment sectors in Mexicali are agriculture, trade and services, and industrial employment. Agricultural employment covers approximately 12 percent, trade and services approximately 52.1 percent, and industrial employment approximates 35 percent of the total labor market. The trade and services sector is the largest source of employment and includes hotel and restaurant, and other tourism related industry which totals to 44 percent of the employment total. Based on employment patterns determined by INEGI, industrial employment has been identified as the fastest growing employment source. This increase is largely due to the growth of the maquiladora industry following the implementation of NAFTA. Figure 1-3 lists some major transportation improvement projects undertaken by Mexico's Caltrans equivalent – Secretaria Asentamientos Humanos y Obras Publicas del Estado de Baja California (SAHOPE).

Nowhere is the influence of international connection more critical than in Imperial County's retail economy. According to an economic border crossing survey conducted in 1998, consumers coming across the border contributed approximately \$70 million in retail sales on a monthly basis to the local economy. Local jurisdictions understand that consumers coming from across the border and conditions governing their purchasing ability are major elements for determining the regions economic prosperity and future trends.

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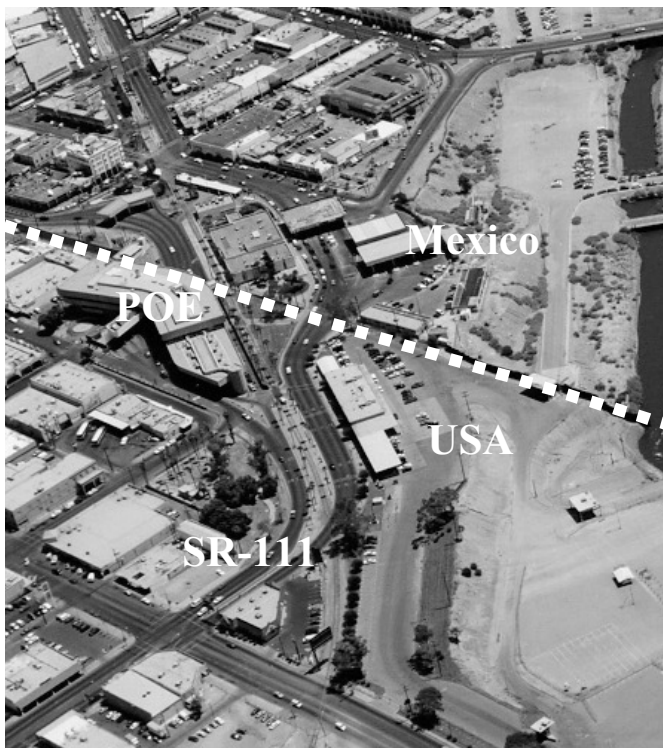
Ports of Entry

The State of California, and the State of Baja California, Mexico, share a border that is approximately 150 miles in length. There are six Ports of Entry (POE) along this border that extends from San Diego County through Imperial County and ends at the Arizona border to the east. Within Imperial County, California and Baja California share three POEs that handle pedestrian, passenger, and commercial vehicle crossings. A description of each facility, operating characteristics, and other relevant information is provided below.

Downtown Calexico POE

Since the opening of the new Calexico East POE in 1996, the Downtown Calexico POE processes pedestrian, bus, and passenger vehicle traffic only. The POE serves as the primary crossing for passenger vehicles and pedestrians between Imperial County and the Municipality of Mexicali. The POE is the second busiest land crossing along the California/Baja California border, with approximately 56 million persons and 14 million auto crossings per year (northbound and southbound). The present facility was constructed in 1973 and consists of five buildings on five acres of land. The facility is served by SR-111, a four lane conventional highway that traverses through Calexico's Central Business District. There are 13 primary vehicle inspection lanes and 16 secondary spaces.

Figure 1-4
Calexico Downtown Port of Entry



In 2000, Caltrans commissioned SCAG to administer the Calexico/Mexicali Border Transportation Study, which identified several improvements with specific emphasis on re-using the former commercial POE site to improve access and address congestion on SR-111. On the southern side, Mexico has plans to upgrade their inspection facility and invest in accompanying circulation improvements to increase gate capacity. Table 1-2 shows 2002 northbound traffic volumes processed through this POE.

Table 1-2
Northbound Port of Entry Traffic-Calexico

Traffic Type	Yearly Total	Average Daily Northbound
Automobile	5,866,865	16,100
Pedestrian	6,619,797	18,100
Buses	1,609	6

Source: U.S. Customs Service, Federal Fiscal Year 2002

Calexico East POE

Located approximately seven miles east of Calexico, the facility was opened in 1996 in response to increased vehicle and commercial traffic along the region's POEs since the passage of NAFTA. The facility handles pedestrian, passenger vehicles, and is the primary commercial vehicle crossing in Imperial County. The Calexico East POE is considered the second busiest POE for commercial vehicles along the California/Baja California border. The facility processes the agricultural, commercial and industrial imports/exports for both the Baja California and Imperial Valley regions. The value of goods carried through the Calexico East POE has grown from approximately \$3.0 billion to \$8.1 billion from 1994 to 1999. The \$8.1 billion represents approximately 27 percent of total trade activity through California's POEs. Since 1999, Mexico has become California's top export trading partner surpassing Japan.

The facility is composed of 87 acres of land and houses the U.S. Customs Service, Immigration and Naturalization Service (INS), and the U.S. Department of Agriculture. The facility provides eight passenger vehicle primary lanes and 24 secondary inspection lanes. Primary inspection lanes are expandable to 12 and secondary inspection lanes are expandable to 36. Commercial facilities consist of three primary import inspection booths; two export booths; 60 import docks, with expansion capabilities to 200; 25 export docks, expandable to 50; and ten bulk import bins.

Figure 1-5
Calexico East Port of Entry



The Commercial Vehicle Enforcement Facility (CVEF) is located just north of the POE and is operated by the California Highway Patrol (CHP). This facility ensures that all trucks entering California undergo safety and regulatory inspections. Trucks must comply with various laws and regulations including weight, vehicle maintenance, licensing, and air quality. Table 1-3 indicates 2002 northbound average daily traffic.

Table 1-3
Northbound Port of Entry Traffic-Calexico East

Traffic Type	Yearly Total	Average Daily Northbound
Automobile	3,325,434	9,100
Pedestrian	2,400	7
Buses	390	1
Trucks	269,412	1,000

Source: U.S. Customs Service, Federal Fiscal Year 2002

Andrade POE

The Andrade POE is located on the eastern end of California, borders with Mexico to the south, the State of Arizona to east, and lies within the Fort Yuma Indian Tribe Reservation. The POE is linked by SR-186, a two lane conventional highway, and then with I-8, a four lane freeway that connects to El Centro and San Diego to the west and Arizona to the east. Across the border, there are connections to Mexicali on BC-8 and to the State of Sonora and the interior of Mexico to the southeast via MX-2. The Andrade-Algodones POE is becoming an extremely important port for tourism between the United States and Mexico. Traffic reconfiguration at the POE and access through the Mexican town of Algodones into the U.S. is of concern to local Mexican government officials, and resolution of this problem is critical.

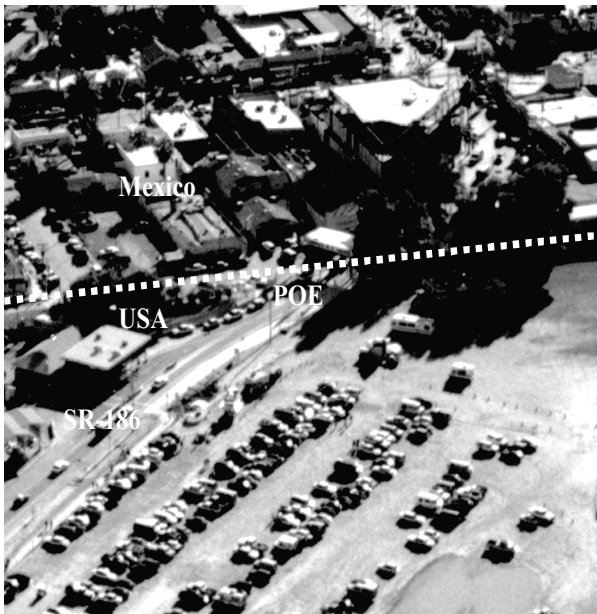


Figure 1-6
Andrade Port of Entry

The existing facility was built in 1970 and consists of a two-acre site with two primary and two secondary inspection lanes, and a main building. The POE is open to passenger vehicles, pedestrian and, on a limited basis, commercial vehicles. During peak winter months southbound traffic may be backed up to I-8, a distance of approximately two miles.

The majority of the tourists park on the U.S. side and walk across the border to purchase medicine or to visit medical related establishments. Delays on SR-186 are in part the result of access back-ups

leading into the parking facilities. Table 1-4 indicates the average daily northbound 2002 traffic.

Table 1-4
Northbound Port of Entry Traffic-Andrade

Traffic Type	Yearly Total	Average Daily Northbound
Automobile	682,155	1,900
Pedestrian	1,669,011	4,600
Buses	84	1
Trucks	1,899	7

Source: U.S. Customs Service, Federal Fiscal Year 2002

Air Quality

Imperial County falls within the SCAG Salton Sea Air Basin (SSAB) which extends to eastern portions of Riverside County. The Imperial County portion of the SSAB is administered by the Imperial County Air Pollution Control District. Conformity analysis for Imperial County transportation projects is included in the approved SCAG 2001 RTP and 2001 Regional Transportation Improvement Program (RTIP). Prior to adoption, the RTP or RTIP was subject to a finding of conformity of four air quality criteria pollutants (National Ambient Air Quality Standard or NAAQS) including PM¹⁰ which is particulate matter less than ten microns in size. The other three criteria pollutants are Carbon Monoxide (CO), Ozone (O₃), and Nitrogen Dioxide (NO₂).

On June 8, 2001 the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) issued a joint transportation air quality conformity determination for SCAG's 2001 RTP. The conformity determination for the SCAG 2001 RTIP was made on September 26, 2001. The U.S. Environmental Protection Agency (EPA) took final action on October 9, 2001 to find that Imperial County has attained the PM¹⁰ NAAQS. This final action will allow Imperial County to remain a moderate PM¹⁰ non-attainment area and avoid a reclassification to serious. Imperial County is still required to submit a moderate area PM¹⁰ control plan (State Implementation Plan or SIP) and is working with the EPA and the State of California to develop a favorable plan with additional control measures.

Proposed Eight-Hour Ozone Non-Attainment

An eight-hour ozone non-attainment area is designated for an area where a high level of ozone is measured for a minimum of eight hours per day. On March 23, 2000, the Air Resources Board (ARB) recommended to the EPA areas identified as Federal eight-hour ozone non-attainment areas. Although Imperial County is an attainment area for the one-hour standard, it is included in the list of eight-hour non-attainment areas.

The EPA will finalize the designations in the near future. Conformity determination will be required 12 months after the designations become effective.

CHAPTER 2 – TRANSPORTATION INFRASTRUCTURE CONDITIONS

This chapter describes the transportation facilities that comprise the highway transportation system in Imperial County. The chapter also provides a brief description of several key arterials that are considered critical to regional mobility and that complement the region's highway system. For each highway facility, a brief description will be provided including type of facility and current and future travel and level of service conditions. As shown in Figure 2-1, these facilities include one Interstate route, seven State Routes, and nine regional arterials. Figures 2-2 and 2-3 provide existing (2000) and future (2020) ADTs. Level of Service (LOS) are also provided for all State facilities and are based on Caltrans LOS definitions. LOS definitions are included in Appendix B.

Highway System

There are several distinct travel characteristics that shape Imperial County's transportation infrastructure needs. These characteristics are equally important to Imperial County's economy and include the movement of agricultural goods, the movement of cross-border goods and services, and recreational travel. Most transportation facilities in Imperial County do not suffer from severe congestion. Trips associated with the above mentioned characteristics provide the greatest impacts to the regions' transportation system.

Interstate 8 (I-8)

Within Imperial County, I-8 is a 79 mile, east-west freeway. Providing two travel lanes in each direction, I-8 has complete grade separations at all intersections. In this area, the main functions of I-8 are to serve as an interregional route for goods movement, provide connection to other states, as well as provide access to desert recreational activities.

In Imperial County I-8 is included as a part of the Interregional Road System (IRRS). The portion of I-8 from the San Diego/Imperial County Line to SR-98 is on the Master Plan of State Highways Eligible for Official Scenic Highway Designation. I-8 is also included in the National Highway System (NHS), is part of the International Border Trade Corridors (IBTC), and International Corridors of Economic Significance (ICES) systems. I-8 is also a designated route in the National Network for Surface Transportation Assistance Act (STAA) for trucks. 2000 and future ADT and LOS are listed in Table 2-1.

Table 2-1
I-8 ADT & LOS

Segment	Year	Post Mile	Location	ADT	LOS
1	2000	Imp R0.0-36.97	Imperial County Line to Imperial Avenue	12,000	A
	2020			20,000-25,000	A
2	2000	Imp R36.97-40.9	Imperial Avenue to SR-111	29,000	A
	2020			56,000-71,000	C-D
3	2000	Imp R40.9-97.0	SR-111 to Arizona State Line	10,000-12,000	A
	2020			16,000-27,000	B

Source: Caltrans – ADTs and LOS are estimates.

State Route 98 (SR-98)

SR-98 is an east-west route that is entirely contained within Imperial County. Traversing a distance of 56.9 miles, SR-98 is mostly a two-lane conventional highway route serving interregional, intra-regional and international travel, as well as providing an alternate route to I-8. Additionally, it supplies access to many agricultural areas. Through the City of Calexico, SR-98 is a four lane facility. SR-98 provides the most direct east/west access to SR-111 and the POE located in Calexico and also provides access to SR-7 and the Calexico East POE.

SR-98 is currently designated as a terminal access route for STAA trucks. SR-98 from SR-111 to SR-7 is included in the IRRS. 2000 and future ADT and LOS are shown below in Table 2-2.

Table 2-2
SR-98 ADT & LOS

Segment	Year	Post Mile	Location	ADT	LOS
1	2000	Imp 0.3-28.74	West junction I-8 to Clark Road	2,000-6,300	B
	2020			3,000-13,000	B-C
2	2000	Imp 28.74-30.30	Clark Road to Dogwood Road	19,000	C
	2020			23,000	E
3	2000	Imp 30.30-32.3	Dogwood Road to SR-111	20,000	D
	2020			36,000-44,000	F
4	2000	Imp 32.3-32.9	SR-111 to Encinas Avenue	20,000	C
	2020			25,000	C
5	2000	Imp 32.9-34.5	Encinas Avenue to Bowker Road	13,400	C
	2020			20,000	D
6	2000	Imp 34.5-39.6	Bowker Road to SR-7	11,000	B
	2020			41,000	F
7	2000	Imp 39.6-42.1	SR-7 to Bonds Corner Road	2,800	B
	2020			4,100	B
8	2000	Imp 42.1 R56.9	Bonds Corner Road to east junction I-8	2,000	B
	2020			3,000	B

Source: Caltrans – ADTs and LOS are estimates.

State Route 78 (SR-78)

Serving as an east-west route, SR-78 traverses a distance of 81.8 miles within Imperial County. Within this route there is a 24 mile route break, in which SR-86 serves as the statutorily designated route, although SR-78 shares the same roadbed. East of this 24 mile portion, SR-78 again utilizes an independent alignment to the Riverside County line.

SR-78 is a two lane conventional highway throughout its alignment in Imperial County, although some portions of the SR-86 alignment have been upgraded to four lane expressway and four lane conventional highway as a result of recent improvement projects. Within Imperial County, SR-78 is an interregional and recreational traffic route; forms part of the IRRS; and has portions which are designated as California State Scenic Highway System. SR-78 is part of the IBTC, and ICES systems. 2000 and future ADT and LOS are presented in Table 2-3.

Table 2-3
SR-78 ADT & LOS

Segment	Year	Post Mile	Location	ADT	LOS
1	2000 2020	Imp 0.0-13.2	San Diego County Line to north junction SR-86	1,000 4,000	B B
2	2000 2020	Imp 13.2-13.8	South junction SR-86 to west junction SR-111	19,000 15,000-22,000	C D
3	2000 2020	Imp 13.8-15.0	West junction SR-111 to east junction SR-111	15,000 25,000-35,000	C D-E
4	2000 2020	Imp 15.0-18.7	East junction SR-111 to west junction SR-115	3,500 7,000	B B
5	2000 2020	Imp 18.7-21.0	West junction SR-115 to east junction SR-115	3,000 11,000	B C
6	2000 2020	Imp 21.0-80.7	East junction SR-115 to Riverside County Line	1,700 5,000	B B

Source: Caltrans – ADTs and LOS are estimates.

State Route 86 (SR-86)

In the County of Imperial, SR-86 provides north-south access from near the International Border to the Riverside County line. This 67.8 mile route primarily provides travel for interregional, intra-regional and international trips. SR-86 is a major goods movement corridor serving the Los Angeles area and other California goods movement centers from the Imperial County region. It is included in the NHS, IRRS, and the IBTC and ICES systems. During the spring, truck traffic transporting agriculture goods constitutes 35 percent of travel on this route.

In Imperial County, SR-86 begins near Calexico as a two lane conventional highway and ends at the Riverside County line as a four-lane expressway. 2000 and future ADT and LOS are included in Table 2-4.

Table 2-4
SR-86 ADT & LOS

Segment	Year	Post Mile	Location	ADT	LOS
1	2000 2020	Imp R0.0-4.5	SR-111 to McCabe Road	5,000 16,000-20,000	B B-D
2	2000 2020	Imp 4.5-6.0	McCabe Road to I-8	18,000 20,000	D D
3	2000 2020	Imp 6.0-L7.3	I-8 to Main Street	25,000 43,000	B C
4	2000 2020	Imp L7.3-8.5	Main Street to Imperial Avenue (El Centro)	27,000 35,000	B C
5	2000 2020	Imp 8.5-7.93	Imperial Avenue to Pico Avenue	35,000 40,000	C C
6	2000 2020	Imp 7.93-11.3	Pico Avenue Road to 14th Street	21,000 33,000	A B
7	2000 2020	Imp 11.3-20.6	14th Street to east junction SR-78	17,000 23,000	A A
8	2000 2020	Imp 20.6-22.4	East junction SR-78 to Cady (45 th Road)	13,000 20,400	B B
9	2000 2020	Imp 22.4-27.3	Cady (45 th Road) to Fredricks Road	7,000-10,000 17,000	B B
10	2000 2020	Imp 27.3-43.6	Fredricks Road to west junction SR-78	9,000 16,000	B B
11	2000 2020	Imp 43.6-53.9	West junction SR-78 to Air Park Drive	10,000 11,000-14,000	A A
12	2000 2020	Imp 56.9-67.8	Air Park Drive to Riverside County Line	12,500 23,000	A A

Source: Caltrans - Future ADTs and LOS are estimates.

State Route 111 (SR-111)

Beginning at the International Border and traveling north, SR-111 is a 65.4 mile route within Imperial County. It provides interregional, local, and recreational travel. SR-111 is considered to be the backbone route of Imperial County as it connects the three largest cities and also is a major goods movement route, particularly agricultural products and cross-border goods and services.

SR-111 serves as both a principal arterial as well as a minor arterial, and is part of the IRRS, IBTC and ICES systems. Additionally, SR-111 is classified as part of the Surface Transportation Assistance Act (STAA), the Subsystem of Highways for the Movement of Extra Legal Permit Loads (SHELL) and forms part of the California State Scenic Highway System.

From the International Border to the I-8 interchange, SR-111 is a four lane expressway. Once north of I-8, SR-111 provides two lane conventional highway service. Within Imperial County, there is one route break, in which SR-111 uses the SR-78 alignment for approximately one mile. 2000 and future ADT and LOS are shown below in Table 2-5.

Table 2-5
SR-111 ADT & LOS

Segment	Year	Post Mile	Location	ADT	LOS
1	2000	Imp R0.0-R1.2	International Border to SR-98	30,000-37,000	D-E
	2020			54,000-80,000	F
2	2000	Imp R1.2-R4.7	SR-98 to SR-86 (Heber Road)	32,000	B
	2020			78,000	F
3	2000	Imp R4.7-R7.7	SR-86 to I-8	29,000	B
	2020			71,000-87,000	F
4	2000	Imp R7.7-22.1	I-8 to east junction SR-78 (Route Break)	6,000-10,000	B
	2020			45,000-50,000	F
5	2000	Imp 22.1-22.6	West SR-78 junction to Alder Street	15,000	E
	2020			15,500-18,000	F
6	2000	Imp 22.6-32.5	Alder Street to SR-115	10,000	B
	2020			12,000	B
7	2000	Imp 32.5-42.7	SR-115 to English Road	7,000	B
	2020			18,000	A
8	2000	Imp 42.7-65.4	English Road to Riverside County Line	6,000	B
	2020			13,000	B

Source: Caltrans - Future ADTs and LOS are estimates.

State Route 7 (SR-7)

SR-7 is a four lane highway with access control which begins at the Calexico East POE and continues approximately 1.2 miles north to its current terminus at SR-98. Efforts to extend SR-7 from SR-98 to I-8 are currently underway with construction expected to begin by 2003. This segment is expected to be open to traffic by 2005. When completed, this route will serve to connect the POE to I-8 and provide for the movement of international commercial goods movement, as well as recreational, and commuter traffic. Upon completion SR-7 will provide the necessary border infrastructure to accommodate increases in trade and goods movement as a result of NAFTA. SR-7 has been identified as a route for large trucks, and part of the NHS and STAA system. It is also designated as part of the IRRS system. 2000 and projected ADT and LOS are shown in Table 2-6.

Table 2-6
SR-7 ADT & LOS

Segment	Year	Post Mile	Location	ADT	LOS
1	2000	IMP 0.0-1.2	International Border to SR-98	10,000	B
	2020			43,000	C
2	2000	IMP 1.2 – 6.7	SR-98 to I-8	NA	NA
	2020			38,000	C

Source: Caltrans - Future ADTs and LOS are estimates.

State Route 115 (SR-115)

SR-115 is primarily a northerly route, serving as an alternate to both SR-86 and SR-111. Traveling for a distance of 33.6 miles, SR-115 is important in facilitating interregional agricultural goods movement and also provides intra-regional travel between various cities within Imperial County. It is included as part of the SHELL system. For the most part SR-115 is a two lane conventional highway, although some short segments are four lanes. 2000 and future ADT and LOS are as follows in Table 2-7.

Table 2-7
SR-115 ADT & LOS

Segment	Year	Post Mile	Location	ADT	LOS
1	2000	Imp R3.2-9.5E	I-8 near Holtville to Evan Hewes Highway	8,000	C
	2020			15,000	D
2	2000	Imp 9.5E – 21.2	Evan Hewes Highway to east junction SR-78	3,000	B
	2020			11,000	C
3	2000	Imp 21.2 – 35.2	West junction SR-78 to SR-111	3,000	B
	2020			8,000	C

Source: Caltrans - Future ADTs and LOS are estimates.

State Route 186 (SR-186)

SR-186 is a 2.1 mile north/south route that serves the far eastern portion of Imperial County and provides access from I-8 to Algodones, Mexico via the Andrade POE facility. SR-186 is classified as a two lane conventional highway. 2000 and future ADT and LOS are as follows in Table 2-8.

Table 2-8
SR-186 ADT & LOS

Segment	Year	Post Mile	Location	ADT	LOS
1	2000	IMP 0.0 - 2.1	International Border to I-8	5,000	B
	2020			14,000	D

Source: Caltrans - Future ADTs and LOS are estimates.

Regional Arterials

Forrester Road: A key north-south arterial running parallel to SR-86 and SR-111, approximately seven miles west of SR-111. It is a two lane facility that connects the City of Westmorland to the north and I-8 to the south, where it then continues south of I-8 for approximately two miles. At the intersection with I-8, there is a diamond interchange with stop sign controls on east and westbound off ramps. According to 2000 traffic estimates, Forrester Road carries between 6,000 and 7,000 vehicles per day. It serves a high percentage of truck traffic and is considered a key transportation segment in the region by providing access for agricultural and cross-border truck traffic traveling within and through Imperial County.

Dogwood Road: A two lane undivided north-south roadway that is approximately two miles west of SR-111. It parallels SR-111 and connects the Cities of Calexico, El Centro, and Brawley. It serves mostly agricultural traffic and connects SR-98 on the south to SR-78 to the north. According to 2000 traffic counts, Dogwood Road carries approximately 4,600 vehicles per day north of SR-98, and between 6,200 – 7,300 north of SR-86.

Orchard Road: A two lane north-south facility approximately seven miles east of SR-111. Orchard Road connects to I-8 and provides travel and access through the City of Holtville. At the intersection with I-8, there is a diamond interchange with stop sign controls on the east and westbound off ramps. This two lane facility has been selected as the preferred alignment for the SR-7 extension project (SR-98 to I-8). Orchard Road will then be upgraded to a four-lane divided highway and will become the new SR-7. The project is currently in the design phase, and construction is expected to begin in 2003.

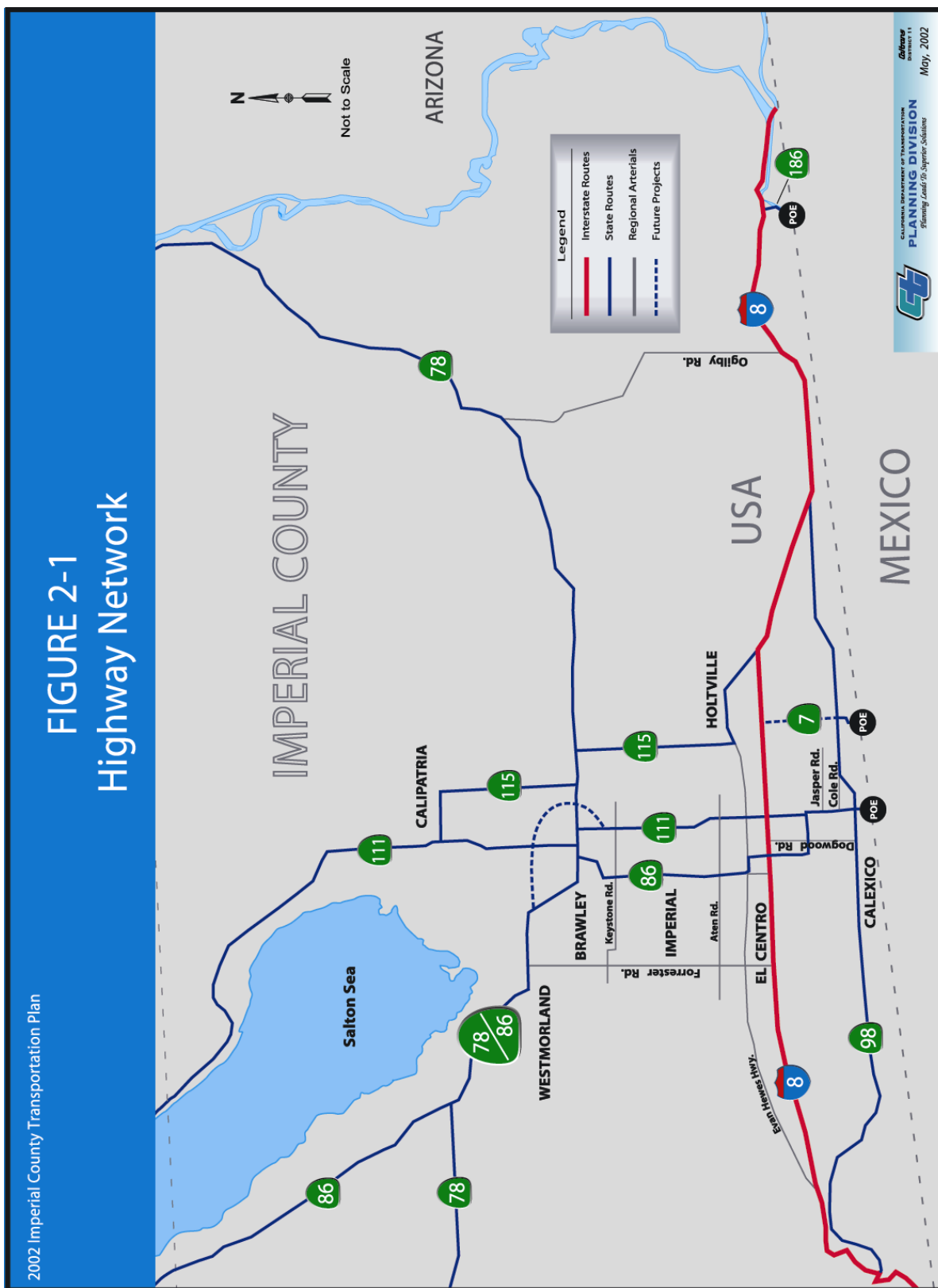
Keystone Road: A two lane facility that provides east-west mobility from Forrester Road to east of SR-115. It is located approximately five miles south of SR-78 and is considered a key segment for commercial trucks traversing between Forrester Road and SR-115. The 2000 average daily traffic on Keystone Road is approximately 1,000 vehicles per day west of SR-111. At this time, traffic volume data is unavailable for the eastern portions of Keystone Road.

Worthington Road: A two lane facility approximately five miles north of I-8. This roadway is also considered a key segment that provides east-west mobility through the central portion of Imperial County from Forrester Road to SR-115 and beyond to eastern portions of the county. According to 1997 traffic data, beginning north of the community of Seeley and terminating east of SR-115, this facility carries between 1,000 to 1,800 vehicles per day.

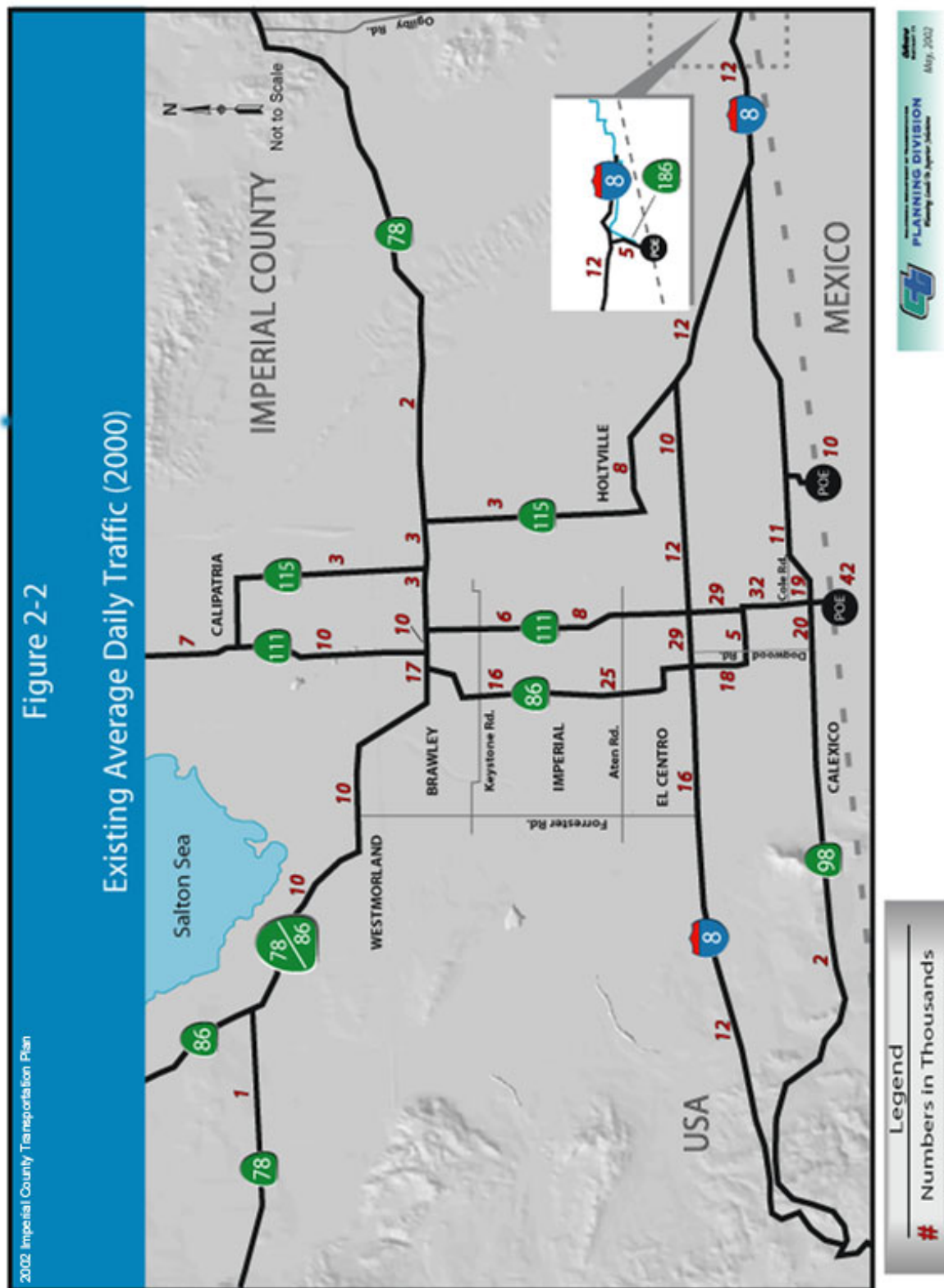
Evan Hewes Highway: A major east-west roadway located approximately three miles north and parallel to I-8. Some portions of Evan Hewes are two lanes, with other portions providing four lanes of travel. It provides east-west travel from the western community of Ocotillo Wells and connects to I-8 east of Holtville. Through the City of El Centro, Evan Hewes Highway serves as Adams Avenue (four lane facility) and is estimated to carry approximately 9,000 vehicles per day. Most other segments of Evan Hewes Highway provide only one travel lane per direction and are estimated to carry approximately 1,000 vehicles per day.

Aten Road: A east-west roadway from Forrester Road to SR-111, with some portions being two lanes and others four lane. From La Brucherie Road to SR-111, Aten Road is a four lane facility. Aten Road provides access to and through central portions of the City of Imperial and carries between 5,000 to 6,500 vehicles per day.

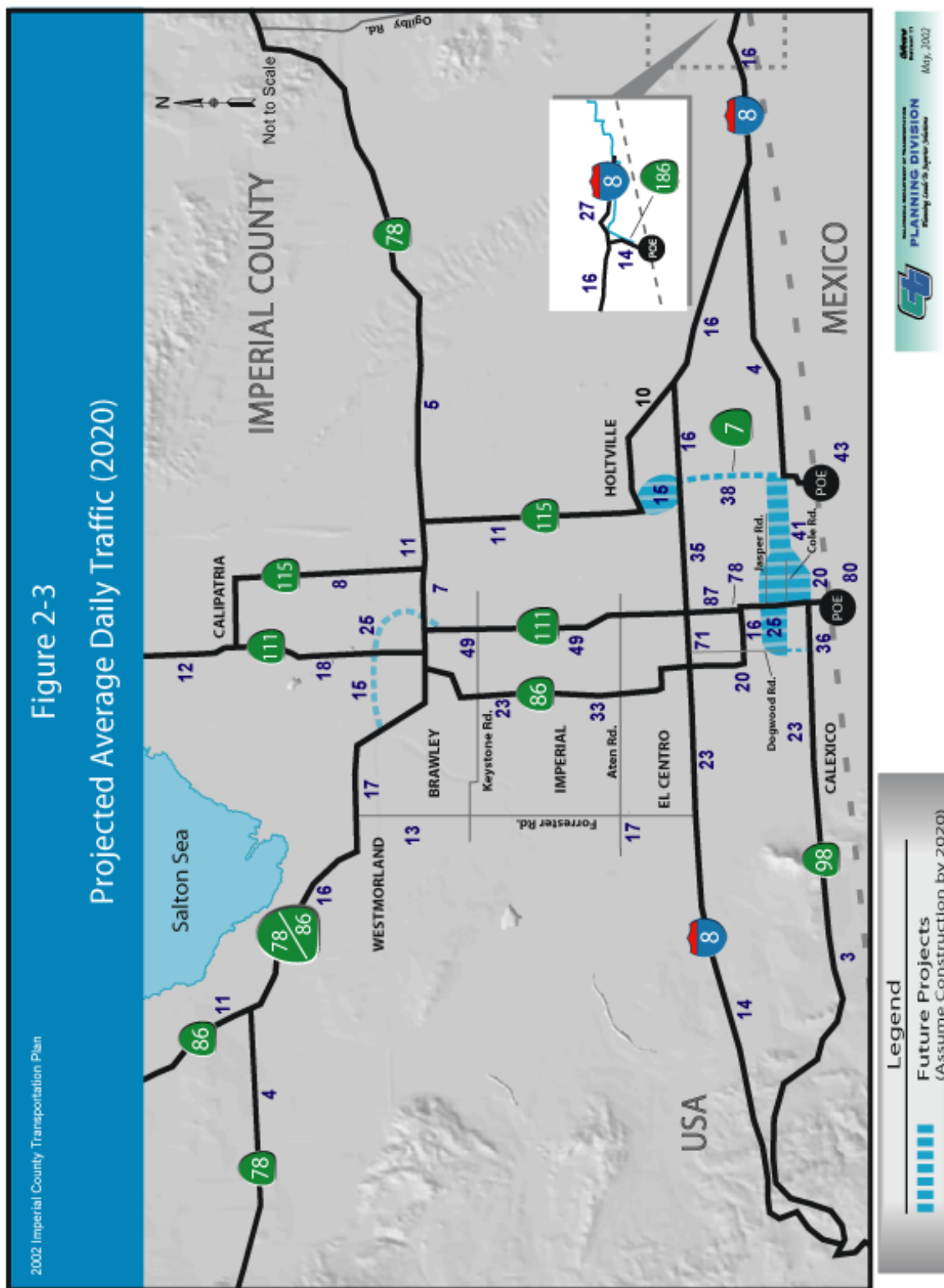
Cole Road and Jasper Road: Both facilities are located north of and parallel to SR-98. The facilities provide east-west access for travel through the northern city limits of Calexico. The average daily traffic on Cole Road and Jasper Road just west of Bowker Road are 5,800 (November 2001 counts) and 1,400 (February 1997 counts), respectively. Cole Road is located approximately 1.5 miles north of SR-98 and provides one lane of travel in each direction. Jasper Road is a two lane facility and is approximately two miles north of SR-98.



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Chapter 3– Goods Movement

Statewide Overview

In California the issue of movement of goods on both a national and international level is an extremely important topic. With the implementation of NAFTA the interdependence between goods movement and the economy has been intensified. The passage of NAFTA has highlighted the role of Imperial County's transportation system, to serve goods movement and the economy.

California is expected to continue to grow in both population and volume of goods movement. This requires unwavering commitment to maintain and improve the transportation system in order to meet population growth and expected increase in goods movement.

In 1993, the California Transportation Plan (CTP) recommended that a Goods Movement Strategy be developed. In 1998, a strategic policy and action blueprint to improve the goods movement transportation system was incorporated as a component of the CTP. This strategy focuses on improving existing system efficiency, through new technology and other means, to maximize system capacity and reliability and minimize long-term transportation system costs. It was developed to ensure that the quality of life in California is maintained and improved in the future.

Imperial County

As a result of the passage of NAFTA, the U.S.-Mexico border region has experienced an explosion of industrial development and urbanization due to increased cross-border trade. Raw materials and finished goods traveling through the POEs have increased, as well as congestion on roadways and border crossings.

Trade between California and Mexico has increased every year with Mexico surpassing Japan to become California's top export trade market in 1999. Total California exports into Mexico exceeded \$19 billion in 2000.

The number of trucks crossing daily between California and Baja California has increased significantly, to record levels since 1996. This increase in truck traffic is in part due to growth in the maquiladora industry manufacturing/assembly plant operations along the California/Baja California border.

Truck traffic through the Calexico East POE serves interregional, interstate, and international trade and goods movement. The majority of commercial truck traffic crossing the California/Baja California border in Imperial County uses the Calexico East POE with a very small (less than one percent) crossing at the Andrade POE. As

such, the majority of truck traffic is generated at the Calexico East POE and utilizes SR-7 and SR-98 as an east-west connection to/from the City of Calexico.

Interregional truck traffic may utilize a combination of State Routes, and County roads to travel through the County, or between business places. However, a large percentage of truck traffic does not stay in the region, and traverses mainly on the State Highway System to reach destinations in the Los Angeles Basin area, other counties in California, and various international markets.

For example, trucks destined for Los Angeles or Long Beach may travel on SR-111, to SR-78/86, and connect with I-10 (Southwest Passage Corridor) in Riverside County. For interstate travel to the east, I-8 is the route of choice for most drivers. Approximately 78 percent of goods and commodities that cross the United State/Mexico border POEs have destinations outside of the region. Therefore, the entire highway network is extremely important to the U.S. economy, beyond what may appear to be “the regional scope”.

By completing SR-7, upgrading SR-111, and constructing the “Brawley Bypass” a direct link to the SR-86 expressway will be finalized. This upgraded facility then connects to Los Angeles via I-10. Completion of these routes will finalize the International Border Trade Corridor (IBTC) system for Imperial County (See Figure 3-1). These routes are also part of the International Corridors of Economic Significance (ICES) system, based on their importance in providing economic success and vitality (See Figure 3-2).

Imperial County Goods Movement Highlights:

- From 1994 to 1999, the value of trade through Calexico/Mexicali has almost tripled from \$3 billion to \$8.1 billion.
- Ninety-eight percent of this trade is transported by trucks.
- Commercial trips at the Calexico East POE, have increased 58 percent, since 1996.
- The Calexico East POE is the busiest commercial crossing in Imperial County with approximately 540,000 annual truck crossings (2002).
- The total truck crossings represent about one third of all crossings through California’s POEs.

Statewide Goods Movement Highlights – California/Mexico Trade Statistics

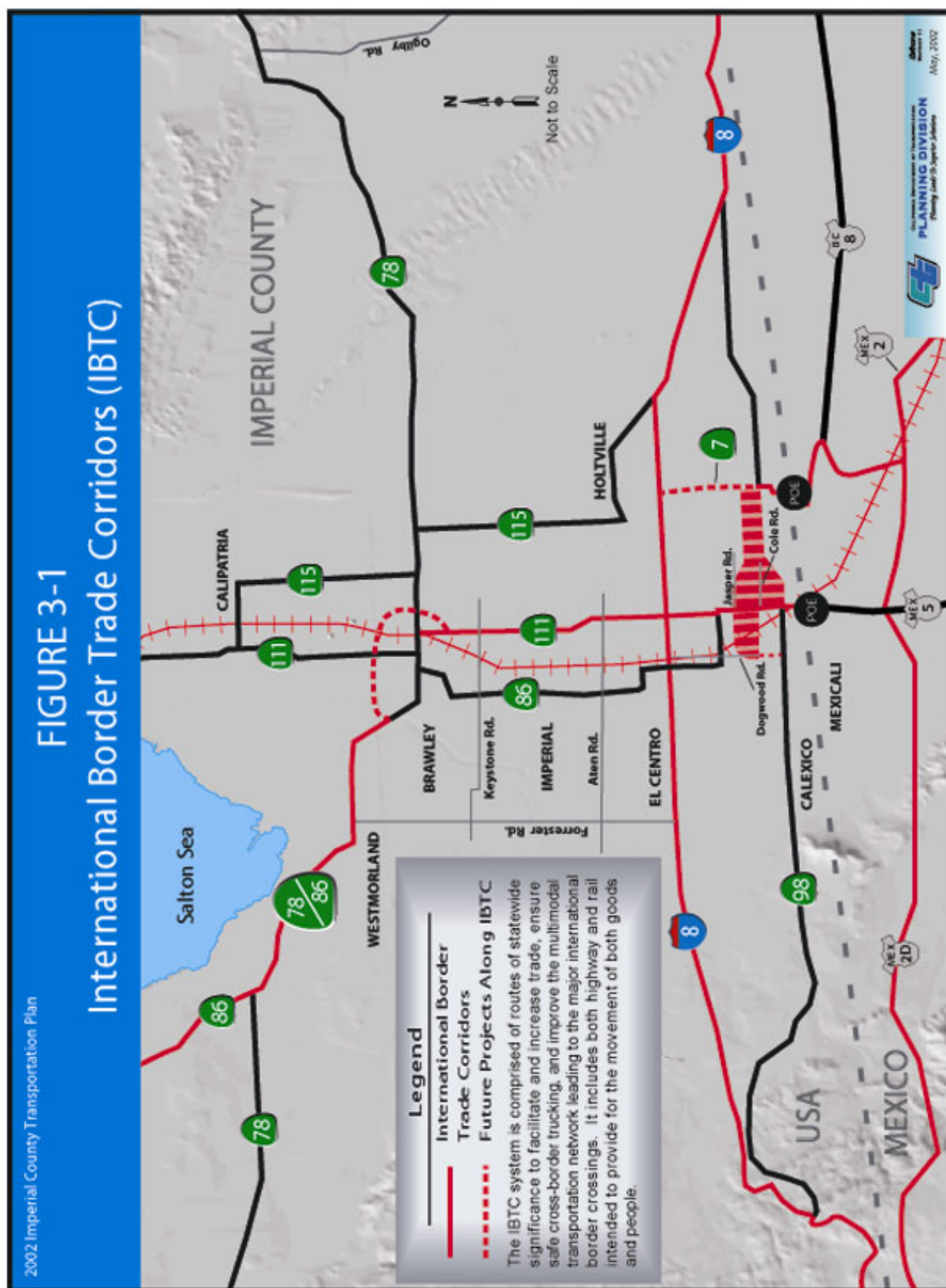
- In 1999, Mexico surpassed Japan to become California’s top export trade market.
- Exports to Mexico have grown from \$6.5 billion to \$19 billion, an increase of 192 percent since 1993.

- The majority of trade is associated with the maquiladora industry, and agricultural goods.
- According to recent surveys, 78 percent of this trade has origins and destinations beyond Imperial County to other California Counties, other U.S. states and international gateways. The survey shows that trade through California/Mexico land Ports of Entry has connections throughout the continental U.S., as well as Asia, Canada, Europe and South America.
- Approximately 1,200 maquiladoras are located in the Baja California border region.
- The number of maquiladora plants has grown from 178 to nearly 1,200, representing a 570 percent increase since 1978.
- The maquiladora industry has also influenced the overall growth in employment for Baja California – approximately 250,000 jobs have been created since 1978.

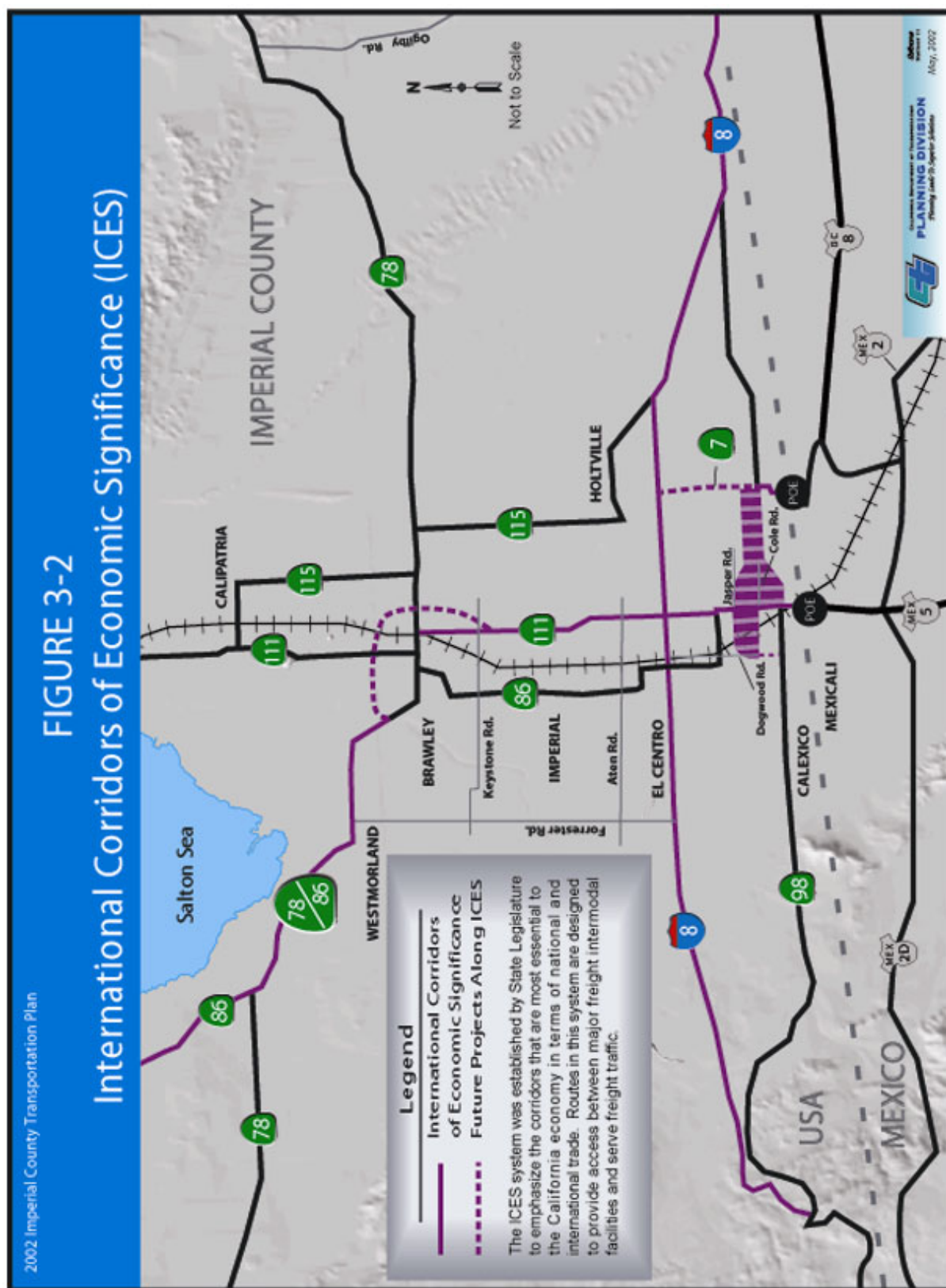
Potential Freight Airport

The last major airport study was conducted in 1992, and identified possible sites for a passenger airport. This report did not evaluate or review any sites and/or data for potential sites. It is recommended that further discussion or a study be conducted independent of this Transportation Plan - Highway Element.

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CHAPTER 4 – FINANCIAL ASSUMPTIONS

A key component for addressing Imperial County's transportation needs is defining a sound and well-balanced investment strategy that determines how much funding will be available and decides how it will be spent over the 2002 Transportation Plan period. This effort is always a difficult task that is driven by several external factors including, but not limited to, population and other demographic related increases, local economic priorities and most importantly, the ever changing transportation financing picture at the State and Federal levels. This chapter is devoted to addressing the region's current and anticipated transportation financing deficiencies and needs. The chapter will outline Imperial County's funding conditions and other fundamental topics associated with transportation funding considered in developing the 2002 Transportation Plan. Discussion will focus on the following components:

- Funding and Transportation Trends
- Funding Revenues
- 2002 Transportation Plan Project Funding Estimates
- 2002 STIP Allocation
- Funding Resources

Funding and Transportation Trends

The underlying feature that sets Imperial County's transportation system apart from many other regions is that it serves two unique but interrelated types of trips. These trips are associated with the movement of agricultural goods and the movement of cross-border traffic. In the broad context of economic significance, the region's transportation system can be characterized as an economic pipeline that links the movement of agricultural and cross-border goods and services with the border region, California, other States in the U.S., and international markets. Furthermore, since the passage of NAFTA the value of goods transported on trucks using the region's transportation system has increased every year. As described in the previous chapter, since 1996, the value of goods has grown from \$3.0 billion in 1994 to \$8.1 billion in 1999, which can be associated with approximately 600,000 trucks crossing through the Calexico East POE and using the region's highway transportation system.

While the region is fortunate to have such dynamic and unique transportation characteristics, the implications to the region's transportation system and quality of life are clear as population increases and goods movement activity continues to grow. Consequently, future transportation investments must be devoted to maintaining and improving mobility and safety for agriculture and cross-border related goods in order to preserve and enhance the quality of life and economic vitality of Imperial County. Based upon these principles, the development of the

1997 Transportation Plan provided the region with its first opportunity for formalizing key transportation investments that focused on improving a defined highway network of interregional and intra-regional importance.

These facilities are identified as specific corridors that are critical to the efficient movement of goods and services from the region's POEs to California, the U.S., and beyond. In 1993, Caltrans and partner agencies, identified such corridors in response to provisions in the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) in order to help guide the region's position for obtaining financial support. This network, previously identified as the NAFTA NET and now renamed as the IBTC, can be characterized as a unified highway trunk system consisting of I-8, SR-7, SR-98, SR-111, SR-86 and SR-78 including the Brawley Bypass (See Figure 3-1).

Since the development of the 1997 Transportation Plan, approximately \$293.4 million dollars have been committed for transportation improvements that directly benefit the IBTC system in the region. As shown in Table 4-1 these funds are committed to five projects and include improvements to SR-111 (currently under construction), SR-7 extension (construction expected in 2003), I-8/Imperial Avenue Interchange Improvements (environmental phase underway), SR-98 Corridor Improvements (environmental phase underway), and SR-78/Brawley Bypass (environmental phase underway).

Table 4-1
Imperial County Projects Serving IBTC System

Project	Project Cost (Millions)	Programmed Funds (Millions)	Estimated Shortfall
SR-111 Improvements	\$119.9	\$117.1	\$0.0
SR-7 Extension*	\$64.3	\$64.3	\$0.0
I-8/Imperial Avenue Interchange Improvements*	\$23.0	\$7.5	\$15.5
SR-98 Corridor Improvements*			
• Widening and Realignment ▪ (SR-7 to SR-111)	\$90.0	\$12.5	\$77.5
▪ Widening west of SR-111 and signalization	\$9.0	\$2.0	\$7.0
SR-78/Brawley Bypass*	\$108.0	\$90.0	\$18.0
Total	\$414.2	\$293.4	\$118.0

*These projects are identified as Near Term Project Commitments in this Plan.

While this investment commitment represents a significant funding pledge to the region, there remains a funding shortfall of approximately \$118.0 million to fund

currently programmed projects. Furthermore, these commitments only provide or are considered to address current transportation deficiencies and mainly attempt to keep pace with incurred transportation impacts that resulted from the passage of NAFTA. It is clear that additional funds will be needed to fully cover current deficits, but equally important, to meet the transportation needs projected over the 20 year period of the 2002 Transportation Plan.

Funding Revenues

Projected revenues for this plan are based on SCAG's revenue estimates data. Specifically, these estimates were included in SCAG's 2001 RTP. Accordingly, the total projected revenues for Imperial County from 2001 through 2025 totaled approximately \$557.0 million (See Appendix C). These revenues capture the entire spectrum of funds expected from local, State, and Federal sources for the region. However, specific to Imperial County and based on historical funding trends, the primary funding source for major transportation projects (new highways, increasing lanes, interchanges etc.) has been the STIP (see Table 4-3 for a brief overview of the STIP).

Specific to STIP estimated revenues, over the next 25 years STIP revenues are estimated at approximately \$8.5 million per year representing a projected total of approximately \$205.7 million for the region (2001 through 2025). This is small increase over 1997 Transportation Plan estimates of \$8 million per year or \$160 million over 20 years (1997 dollars).

2002 Transportation Plan Project Funding Estimates

In developing project priorities for this 2002 Transportation Plan, funding is assumed to follow historical practice covered by STIP revenues. It is estimated that approximately \$205.7 million will be available for the region over the period of the 2002 Transportation Plan although a total of \$557 million is expected. After accounting for the Near Term Project Commitments shortfalls currently estimated between \$166.0 million and \$173.0 million, the region will be left with approximately \$32 - \$39 million that could be assigned to future transportation investments.

2002 Transportation Plan improvement priorities include 23 projects that promote safe and efficient mobility along Imperial County's highway network. These 23 projects are listed in a five tier funding structure, which moves projects forward in priority order should additional funding (i.e. TEA 21, CBI, etc.) become available. The projects are set within three time frames: 2002-2012, 2012-2022, and 2022 and beyond (See Table 6-1). Further detailed discussion on all project categories will be provided in Chapter 6 – 2002 Project Listings.

2002 STIP Allocation

The current 2002 STIP allocation can be broken down to four projects amounting to nearly \$28.3 million, and support Near Term Project Commitments (See Table 4-2). Beyond these projects, the 2002 Transportation Plan gives priority to funding the remaining Near Term Project Commitment shortfalls. These are projects that support and follow transportation project priorities established in the 1997 Transportation Plan and programmed in subsequent STIPs.

Table 4-2
Imperial County 2002 STIP Allocation

Project	STIP Totals (Millions)
SR-111 Relinquish existing SR-111 (Phase 1)	\$2.4
SR-7 Extension (right of way) (ITIP allocation)	\$4.6 (\$6.0)
I-8/Imperial Avenue Interchange Improvements	\$6.3
SR-78/Brawley Bypass	\$15.0
Total	\$28.3

Funding Sources

It is reasonable to assume, based on past financial practice, that only \$205.7 million will be available and deciding how this will be spent will be a key challenge for the region. In order to cover the expected shortfalls, the financial challenges facing the region over the 20 year period of the 2002 Transportation Plan and future updates will be to 1) maximize future funding resources (i.e., which transportation investments will provide the greatest benefits), and 2) look beyond the traditional funding resources to address current and future funding needs.

By revisiting the region's priorities and documenting them in future transportation plan updates, the region addresses and sustains its' commitment to maximize future investments. The key question that remains is what other funding sources/choices are available to cover shortfalls, and other incurred costs associated with proposed project priorities. Table 4-3 provides a review of the traditional funding resources and a cursory review of other fundamental and innovative funding sources that support transportation investments.

Table 4-3
Transportation Funding Sources

Funding Programs	Description
<i>Federal Funding Categories</i>	
Surface Transportation Program (STP)	STP guarantees counties 110% of their allocation. Funds may be spent on roadway projects, bikeways, pedestrian facilities, transit facilities, safety, ridesharing, traffic management, parking, environmental enhancements, intermodal port facilities, transportation control projects and system operational improvement projects.
Congestion Mitigation and Air Quality Improvement Program (CMAQ)	CMAQ funds can be used for transportation projects that improve air quality in federally designated air quality non-attainment areas. For Imperial County, CMAQ funds are limited since funds are assigned to non-attainment regions.
Transportation Enhancement Activities (TEA)	TEA funds can be used for transportation related capital improvement projects that enhance quality of life, in or around transportation facilities (i.e., public art or historic projects linked to transportation, bicycle, pedestrian, transit, landscaping). Projects must be over and above the required mitigation and normal transportation projects.
Highway Bridge Replacement and Rehabilitation Program (HBRR)	HBRR funds are used for construction, replacement, or rehabilitation of bridges that are not on a Federal-Aid highway system (i.e., rural minor collectors and local roads).
<i>State Funding Categories</i>	
State Transportation Improvement Program (STIP)	The RIP program constitutes 75% of STIP funds and is determined by SCAG with the discretion to select and program transportation improvement projects on State highways, local roads, etc. STIP funds can be used for the construction of carpool lanes, freeway interchanges, rail extensions, rail grade separations, intermodal freight facilities, improved transit stations, etc.
• Regional Improvement Program (RIP)	
• Interregional Improvement Program (IIP)	Caltrans and the California Transportation Commission (CTC) have the discretion for programming these funds, which constitutes 25% of the STIP. These projects will focus on interregional highways that serve people and goods movement from region to region. Examples of projects are intercity rail/rail expansion, and projects of statewide significance.
State Highway Operations and Protection Program (SHOPP)	SHOPP funds are used for rehabilitation projects to preserve and protect the state highway system. Projects included in the program are limited to capital improvements relative to maintenance, safety and rehabilitation of state highways and bridges that do not add new traffic lanes to the system. Bridge replacement and seismic retrofitting also qualify for the funding.

Funding Programs	Description
<i>Local Revenue Categories</i>	
Transportation Development Act (TDA)	Funds are generally used for transit operating assistance and capital projects. If there are no unmet transit needs, then funds are eligible for local street and road maintenance and rehabilitation projects. Based on SCAG 2001 RTP estimates, a two percent growth rate was assumed through 2010 for TDA revenue estimates for Imperial County.
Local Sales Tax	These are generally voter approved programs administered by the County. Based on SCAG estimates, a two percent growth rate of funding is also estimated through 2010.
<i>Examples of Other Funding Sources</i>	
Traffic Mitigation/Impact Fees	This category can be characterized as project specific financing sources to fund new transportation facilities associated with new developments. This category may include local assessments on new developments generating additional traffic. Fees may be assessed area-wide and only in those areas affected by the new development. This is done on a project –by-project basis.
General Funds	This category is not generally considered a reasonable source for financing transportation projects. These funds come directly from local governments general fund budgets.
Joint Development	This category can be described as a cooperative financing strategy that involves private and public parties. Examples of joint development include the private development of a public facility or cooperative financing of public facilities. The binding document that governs this financing strategy is a joint development agreement.
Bond Measures	Cities and counties may issue general obligation bonds to fund transportation improvements. These bonds are payable through increased property taxes by a 2/3 majority vote.

Funding Programs	Description
<i>Examples of Other Funding Sources</i>	
Grant Anticipation Revenue Vehicles (GARVEE)	<p>The principle behind this financing approach allows the issuer to pledge future federal highway funds to repay investors to build current transportation improvement projects. The criteria for issuing GARVEE bonds are included in SB 928 and presented in the 2001 SCAG RTP. The bill which passed in 1999:</p> <ul style="list-style-type: none">• Would authorize the CTC, in cooperation with Caltrans and SCAG, to establish guidelines for eligibility for GARVEE bond funding allocations;• Would authorize the CTC, through the State Treasurer to issue GARVEE bonds to be disbursed by Caltrans;• Would limit GARVEE bond allocations for any county to 50 percent of that county's share of expected federal highway revenues for ten years following the allocation;• Would count all cost overruns and financial costs against that county's STIP share in the year that the federal revenues would be used to pay off the project; and• Would require the CTC to dedicate and pledge future federal transportation funds to pay the interest, principal, and premium on the bonds on any outstanding GARVEE bonds in the State.

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CHAPTER 5 – METHODOLOGY

This section presents the methodology/transportation planning processes carried out to develop the 2002 Transportation Plan. This methodology is depicted in Figure 5-1. This process incorporated transportation planning efforts initially undertaken during the development of the 1997 Transportation Plan. In the previous planning effort, specific emphasis was placed on crafting a program of short, mid, and long-term transportation investments that respond to the particular needs of Imperial County. Subsequently, it did not reflect the typical planning efforts commonly used for an urbanized region, which generally includes an extensive technical and analytical assessment for determining potential transportation priorities and impacts in response to addressing heavily congested conditions.

For Imperial County, unlike urban regions, the transportation planning process focused on addressing the unique characteristics of the region, which is mostly devoted to the movement of agricultural and cross-border goods and traffic on the region's highway system. Furthermore, it is important to note that this process only provided for a comprehensive approach for looking at the regional highway transportation needs of Imperial County. While these issues are different, they are no less important than those relating to a more urbanized area.

The activities carried out during the transportation planning process are briefly described below and include conducting public workshops, development of a project evaluation criteria, and project selection and prioritization procedures.

Public Workshops

Just as partnering agencies/stakeholder's participation was valuable during the planning process, public discussion also played a key role in generating feedback and input that helped with the development of the 2002 Transportation Plan. This effort entailed meeting with several focus groups and conducting three public workshops throughout the County. This effort allowed for the appropriate feedback, ideas, and concerns to be taken into consideration and went beyond the required public outreach efforts as established by ISTEA for developing regional transportation plans.

The public workshops were conducted in early October 2001 and late May 2002, and were held in three locations throughout the County. The workshops were conducted in the Cities of Brawley, Calexico, and El Centro. Announcements about these workshops were distributed to gather a wide range of participation and were sent to elected officials, government staff, non-profit public service agencies, Native American Tribes, and private sector industry representatives. Public service announcements were also sent to news media groups. The attendance list and public input from these public workshops can be found in Appendix D.

The three-hour workshops allowed attendees to review and gather information, and discuss their transportation needs and review project priorities in a relaxed “open house” format. Attendees were provided with an introduction and history of the transportation plan and the proposed goals and objectives. Key information was also provided on the County’s current and forecast transportation conditions through maps, project report fact sheets, and other displays. The format of these workshops provided an opportunity for the community to review and comment on proposed projects, propose new ideas and/or conceptual transportation improvements, and to express other transportation related needs or issues in the region. General consensus and support was expressed for the transportation plan and proposed projects by the many participants that attended the workshops. Input from the workshops and comments gathered during the public review process prior to adoption are summarized in Appendix D.

Project Evaluation Criteria

As part of the transportation planning process, an important challenge for the TAC was comparing the different merits and benefits of transportation projects proposed for inclusion in the 2002 Transportation Plan. To do this, over a series of several meetings, TAC members developed and defined evaluation criteria to better understand the tradeoffs and relative merits of each project. This effort provided the necessary background and information to make coordinated and practical transportation investment decisions. This process also ensured that fundamental background and information was documented.

In developing the evaluation criteria, every attempt was made to identify “emphasis areas” that fit the particular needs of the region, while taking into account the mission statement, seven goals, and core initiatives drawn from previous transportation plan efforts. Subsequently, a common theme focused on maintaining and improving mobility for people and goods in order to enhance the quality of life and economic vitality of Imperial County.

As a first step, an initial evaluation criteria list was assembled and was drawn from previous 1997 Transportation Plan efforts. The list was revised to incorporate emphasis areas that reflected the region’s unique transportation characteristics. Finally, “emphasis areas” were established. These emphasis areas are qualitative and quantitative criteria that ranged from defining deficiencies to the existing transportation facilities to identifying possible environmental or other constraints associated with proposed projects. Transportation projects were then rated against a matrix consisting of the evaluation criteria. The emphasis areas are listed and described in Table 5-1. The complete project evaluation matrix summarizes all projects that were considered and is provided in Appendix E.

Table 5-1
2002 Imperial County Transportation Plan Project Evaluation Criteria

Recommended Emphasis Areas	Description
Project Cost	What are the estimated costs (order of magnitude estimates) of the proposed transportation project?
Plan or Program Status	Is the project in the 1997 Plan, or in the RTIP, or included in other planning or technical studies?
Consistent with Local Transportation, Community, and Land Use Priorities	Are the projects consistent and/or complement surrounding transportation, community, and land use plans, goals, policies, and/or other jurisdictional plans (i.e., general plans or specific plans)?
Social and Community Equity	Will the projects facilitate mobility and accessibility while considering consequences or benefits such as: <ul style="list-style-type: none"> • Overall Community Character and Identity • Local Streetscape Design • Other Non-Motorized Transportation Modes and Facilities (i.e., transit services and centers, pedestrian and bicycle friendly mobility and facilities) • Accessibility to Jobs
Environmental and Physical Constraints	Is there a substantial environmental and/or physical obstacle to implementing the project? Examples can include: <ul style="list-style-type: none"> • Habitat and Wildlife • Historic or Archeological Site • Displacement of Residences or Businesses • Air Quality • Noise Levels • Alterations to Existing Transportation Facilities • Alterations to Present and/or Planned Land Use
Existing Facility Conditions – LOS and ADT	The existing LOS (2000) and ADT will be posted for each applicable state highway segment.
Future Facility Conditions – LOS and ADT	Projected LOS (2020) and ADT will be posted for each applicable state highway segment.
Traffic Accident Rate	Caltrans publishes actual and expected traffic accident rate data per million of vehicles.
Benefit Regional and/or International Goods Movement	Does the project facilitate goods movement between Imperial County and surrounding counties and Arizona, and/or between Mexico, and other locations outside the Country?

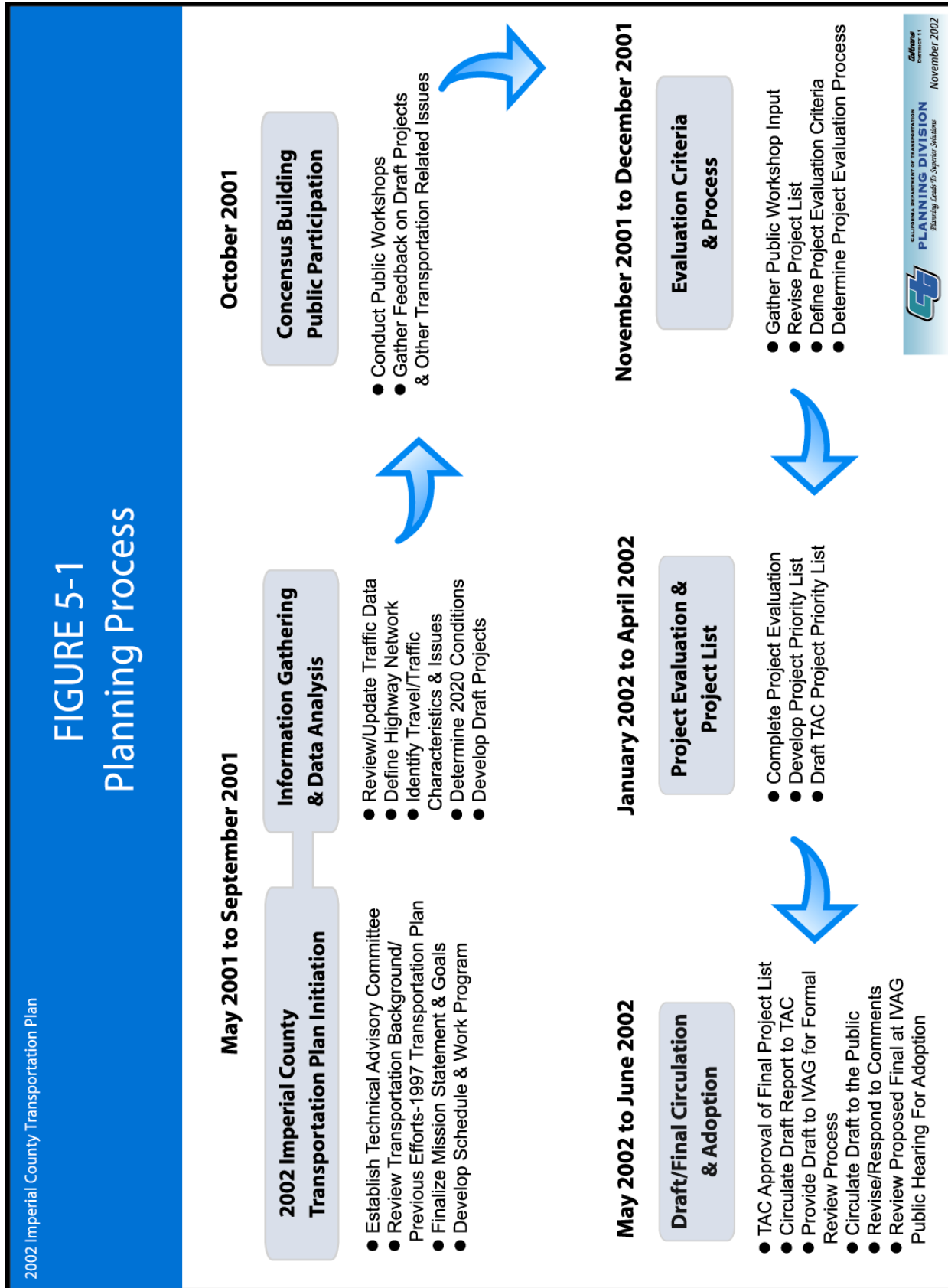
Project Selection and Prioritization

The evaluation criteria was developed and public workshops conducted which formed the groundwork for identifying current and future transportation needs and possible transportation improvements to the highway system. Subsequently, the identification and selection of projects followed an all-inclusive approach based on coordinated and cooperative TAC discussions, and key feedback gathered during the public workshops.

The initial effort involved reviewing and screening each project to ensure that it specifically addressed, and was consistent with, the goals and objectives of the transportation plan. Each project was then required to undergo a broad review against the evaluation criteria, and an assessment that would determine if the proposed project would complement previous project priorities and/or obligations. To do so, this process involved revisiting previous project priorities included in the 1997 Transportation Plan to determine if the project identified at that time would still provide significant benefits to the highway system considering 2002 conditions.

The 2002 Transportation Plan reflects project priorities based on funding changes and new travel and socio-economic data. Throughout this process, a significant amount of background materials was provided and presented to the TAC and the public including, but not limited to, various color-coded maps that detailed project related impacts and regional merits to the highway system.

Once the project candidate list was developed, a ranking strategy was created and applied to the proposed list. This priority assessment effort set the framework for determining spending priorities over the period of the 2002 Transportation Plan. Table 6-1 depicts the final project list and corresponding prioritization recommendations as approved by the TAC in the Spring of 2002. Additional discussion on the five spending priorities is presented in the following Chapter – 2002 Project Listings.



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Chapter 6 - 2002 Transportation Plan Project Improvements

In developing the 2002 Transportation Plan, the capacity to perceive Imperial County's highway network as an integrated and unified highway trunk system helped guide the TAC to make critical and practical transportation improvement choices. While there may be many attributes that can define and impact the region's transportation system, it is important to recognize transportation and travel associated with the movement of agricultural goods, cross-border goods and services, and recreational travel are the key determining factors behind Imperial County's transportation activity. The following section identifies the proposed transportation improvement priorities for the 2002 Transportation Plan. These projects are consistent with the adopted transportation mission statement and goals, and corresponds to current financial commitments and/or previous project priorities set forth in the 1997 Transportation Plan.

2002 Transportation Plan Project Categories

The 2002 Transportation Plan identifies 22 transportation improvements and are presented in five spending priority categories based on three time frames (See Table 6-1). The five spending categories and corresponding time frames are Near Term Project Commitments (2002 – 2012), Near Mid Term Projects (2002 – 2012), Mid Term Projects (2012 – 2022), Mid Long Term Projects (2012 – 2022), and Long Term Projects (Beyond 2022). While there are a number of valuable candidate projects proposed in the 2002 Transportation Plan, maintaining and supporting Near Term Project Commitments is the first priority of the TAC and 2002 Transportation Plan. As such, the following discussion focuses on the framework for the region's other transportation project priorities based on the availability of future funding resources, and would follow the full programming and implementation of Near Term Project Commitments (See Figure 6-1). All transportation project improvements are presented in a conceptual and/or order of magnitude level. Detailed analysis and or project description is expected to be undertaken during the required project development process. All transportation projects are depicted in Figure 6-2.

Near Term Project Commitments (2002 – 2012)

Current regional accomplishments include the programming of approximately \$176.3 million in STIP and other funding resources for four projects. The 2002 Transportation Plan builds upon these projects and calls for the addition of one more project - SR-115 realignment and extension (I-8 to Evan Hewes Highway), and defining them as Near Term Project Commitments in order to ensure that they move forward through full construction by 2012. Furthermore, the implementation of these projects reaffirms the core commitments previously identified by the public and regional stakeholders during the development and outcome of the 1997 Transportation Plan. These projects include the extension of SR-7 from SR-98 to I-8 as a four lane expressway, interchange improvements on I-8/Imperial Avenue, SR-98 corridor improvements, construction of the SR-78/Brawley Bypass, and the realignment and extension of SR-115 from I-8 to Evan Hewes (See Figure 6-1).

Table 6-1
2002 Imperial County Transportation Plan - Project List

Project ID	Project Description	Project Cost (millions)
Near Term Project Commitments (2002 – 2012)		
A	SR-7 Construct 4 lane expressway from SR-98 to I-8	\$64.3 ((\$64.3 programmed)
B	SR-78/SR-111 Construct 4 lane expressway "Brawley Bypass"	\$108.0 ((\$90.0 programmed)
C	I-8 Imperial Avenue interchange improvements	\$23.0 ((\$7.5 programmed)
D	SR-98 <ul style="list-style-type: none"> • Widening & signalization, SR-111 to Dogwood • Widening and/or realignment, SR-111 to SR-7 	\$9.0 (\$2.0 programmed) \$90.0 (\$12.5 programmed) \$48.0-\$55.0
E	SR-115 Construct 4 lane extension from I-8 to Evan Hewes Highway	
	Total Cost for Near-Term Commitments	\$342.3 – \$349.3 (\$176.3 Programmed)
Proposed Projects – Near Mid Term (2002 – 2012) Amendment		
1-A	SR-78 Access improvements - Proposed SDSU Campus in Brawley	\$0.25 – \$3.0
Proposed Projects – Near Mid Term (2002 – 2012)		
1	SR-98 Widening and/or realignment from SR-111 to Dogwood Road	\$30.0 (est. \$15.0/mile)
2	SR-111 Improvements - south of SR-98 to POE	\$2.0 – \$50.0
3	SR-111 Upgrade to 4 lane freeway from SR-98 to I-8 with interchange(s) at several locations	\$90.0 (est. \$15.0/mile)

Project ID	Project Description	Project Cost (millions)
Proposed Projects – Near Mid Term (2002 – 2012)		
4	SR-111 Upgrade to 4 lane conventional highway from SR-78 to SR-115	\$50.0 (est. \$15.0/mile)
5	Construct new east-west facility Corridor from Aten Road to Keystone Road	\$90.0 – \$120.0 (est. \$15.0/mile)
6	Construct new north-south facility SR-78 to I-8 Corridor from Forrester Road Corridor	\$120.0 (est. \$15.0/mile)
	Total Cost for Near-Mid Term Projects	\$382.0 – \$460.0
Proposed Projects-- Mid Term (2012 – 2022)		
7	SR-98 Construct bridge structure at railroad crossing	\$1.5
8	Construct new north-south facility West of SR-111 from I-8 to SR-98	\$90.0 (est. \$15.0 per mile)
9	Construct Westmorland Bypass Construct 4 lane expressway	\$60.0-\$80.0
10	SR-78 Improvements from SR-115 to Riverside County Line	\$50.0 (est. \$5.0 per mile)
	Total Cost for Mid Term Projects	\$201.5 – \$221.5
Proposed Projects – Mid Long Term (2012 – 2022)		
11	I-8 Widen to 8 lanes from new north-south route to SR-111	\$60-\$90 (est. \$15.0 per mile)
12	SR-111 Interchange improvements from I-8 to SR-78	\$60.0 (est. \$24.0 per interchange)
	Total Cost for Mid-Long Term Projects	\$120.0 – \$150.0

Project ID	Project Description	Project Cost (millions)
Proposed Projects – Long Term (Beyond 2022)		
13	I-8 Construct interchange at Austin Road	\$24.0
14	SR-115 Construct new 4 lane expressway from SR-78 to Brawley Bypass	\$36.0
15	SR-115 Widen to 4 lane expressway from SR-78 to SR-111	\$60.0-\$70.0 (est. \$5.0 per mile)
16	SR-115 Widen to 4 lane expressway from Evan Hewes Highway to SR-78	\$60.0-\$70.0 (est. \$5.0 per mile)
17	SR-186 Widen to 4 lane conventional or construct interchange improvements	\$10.0 (est. \$5.0 per mile)
Total Cost for Long Term Projects		\$190.0 – \$210.0

Notes: No priority is implied within each spending category by the order in which each project is presented. The project number assigned to each project only represent a project identification number.

Project Cost for *Near Term Project Commitments* reflect current Total Cost to date (2002). Project Cost for all *Proposed Projects* represent 2002 dollar estimates and are based on order of magnitude cost figures.

Near Mid Term Projects (2002 – 2012)

The second set of projects provide a compendium of key improvements that are critical and are considered an extension of the above mentioned project improvements. These projects are directed towards providing significant north-south travel improvements along SR-111, particularly relieving current congested conditions from SR-98 and the Calexico downtown POE. Also included in this category is the logical extension of the currently programmed SR-98 project. The Near Mid Term projects also focus on improving north-south, and east-west travel by introducing two new regional transportation corridors. In all, coupled with the Near Term Project Commitments these projects will provide significant relief and mobility to north-south, and east-west travel along the IBTC. Furthermore, as goods movement and cross-border traffic increases, preliminary model results indicate that the greatest relief to SR-111 would be achieved with the implementation of a new north-south corridor west of SR-111. It is important to note that should funding exceed the financial projections over and beyond Near Term Project Commitments before 2012, the Near Mid Term Projects list is to be used as a foundation for expenditure of additional funding. As apart of the Near Mid Term Project amendments, project 1-A proposes access improvements for the proposed SDSU campus in Brawley.

Mid Term Projects (2012 – 2022)

In addition to the previous category (Near Mid Term), the Mid Term projects also focus on providing relief and mobility improvements to north-south travel through the implementation of a new north-south corridor from I-8 to SR-98. These projects also focus on minimizing transportation related impacts of commercial vehicles by providing a connection and extension of the Near Mid Term north-south corridor with the implementation of the Westmorland Bypass. Projects in this category also include improvements along SR-98 west of SR-111 (bridge structure/railroad crossing), and SR-78 safety improvements (SR-115 to Riverside County Line). This category contains a total of four projects that would be committed for funding between 2012 and 2022.

Mid Long Term Projects (2012 – 2022)

The Mid Long Term category includes projects that would be implemented within the same time frame as the Mid Term Project category (2012-2022). The key difference is that if additional funding became available during this time period, the estimated revenues will go toward Mid Term projects and moneys remaining will be allocated to the Mid Long Term projects. This category only includes two projects which are expected to provide relief to future transportation conditions along I-8 by widening it to six lanes between SR- 111 and the new proposed Near Mid Term north-south corridor, and providing several interchange improvements along SR-111.

Long Term Projects (Beyond 2022)

The Long Term Projects category includes projects that address Imperial County's long term vision which are dedicated to addressing the region's expected population growth and travel activity increase. As indicated in Table 6-1, projects include improvements along SR-115 that complement the future SR-7 Expressway. By providing these improvements this corridor would provide an alternate and direct connection to SR-78 and would relieve traffic along SR-111 and the proposed Near Mid Term north south corridor. Additional projects in this category focus on addressing future transportation conditions in anticipation of future land use and population changes and include a new interchange at I-8/Austin Road, and widening improvements along SR-186.

Next Steps

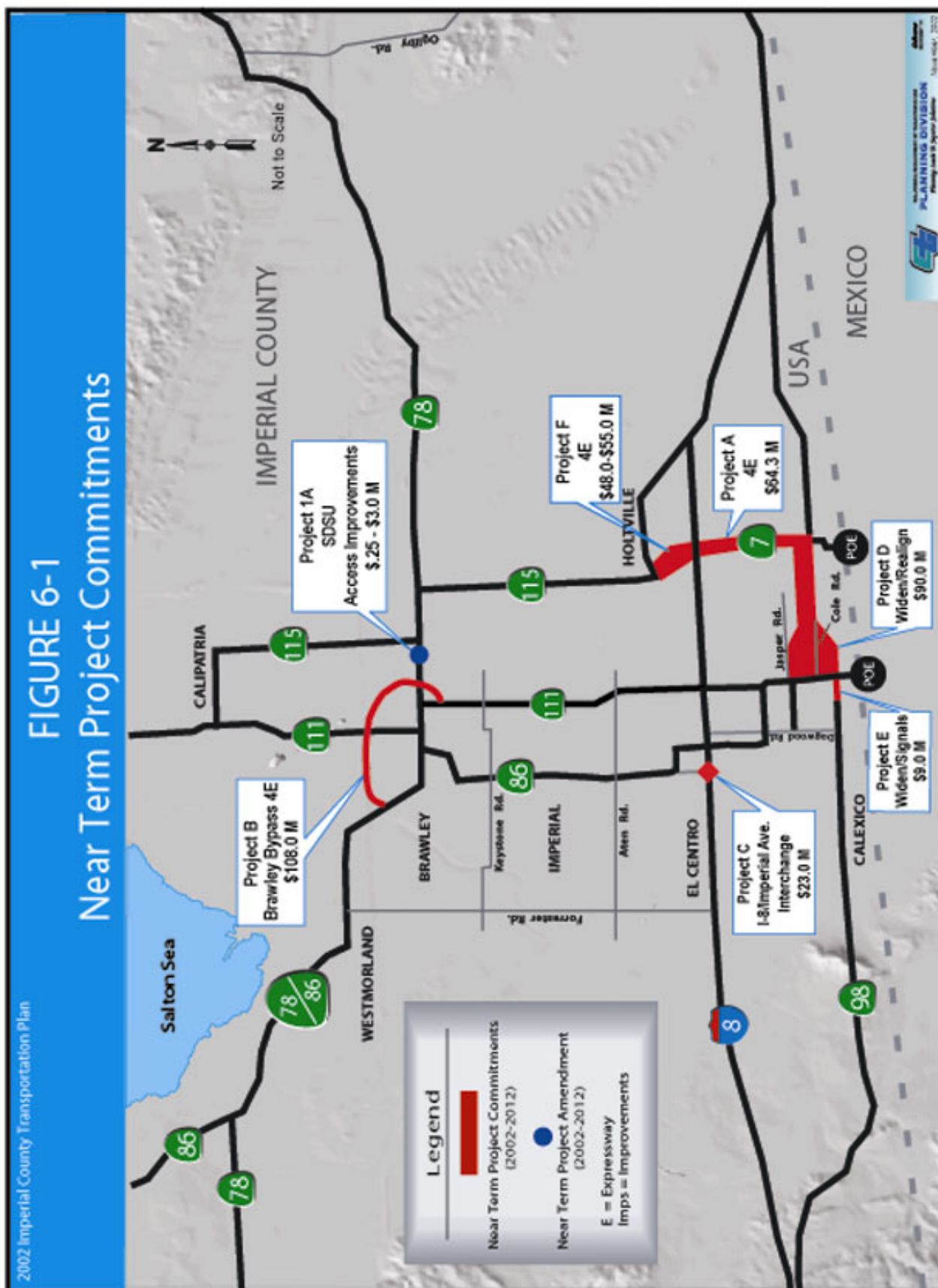
Nowhere is the impact of agricultural, goods movement, and cross-border traffic more critical than in Imperial County's highway network. Furthermore, as the region continues to grow and transportation and travel activity increases, these unique but interrelated trips will undoubtedly impact the future of the region's highway network, and most importantly, the quality of life of Imperial Valley's residents and its visitors. In addition to delays for drivers resulting from an increase of cross-border traffic, these impacts will take the form of rising intra-county, intra-state, and international commercial vehicle traffic, and changes to north-south and east-west travel behavior. Appropriately, information provided in this 2002 Transportation Plan will establish the foundation for building consensus on future transportation projects – with future funding dedicated to the Near Term Project Commitment shortfalls. As transportation funding constraints will likely be a continuing reality, the remaining transportation priority categories described here represent the best combination of strategies and improvements developed by the TAC and adopted by the IVAG Regional Council.

The 2002 Transportation Plan includes projects of regional significance that are needed to maintain efficient mobility and safety along the region's highway system. Adoption of the 2002 Transportation Plan will serve as the foundation for future programming, preparation of future STIPs, and other federal, state, or local funding opportunities. In June 2002, the TAC submitted its draft plan to the IVAG Regional Council and requested permission to distribute for review of draft plan, and request for a public hearing for adoption of the Final Plan. On September 25, 2002, the IVAG Regional Council held a public hearing for any final comments. Following public comment the IVAG Regional Council adopted the 2002 Imperial County Transportation Plan. The adopted plan will be submitted to SCAG for inclusion in their upcoming RTP update.

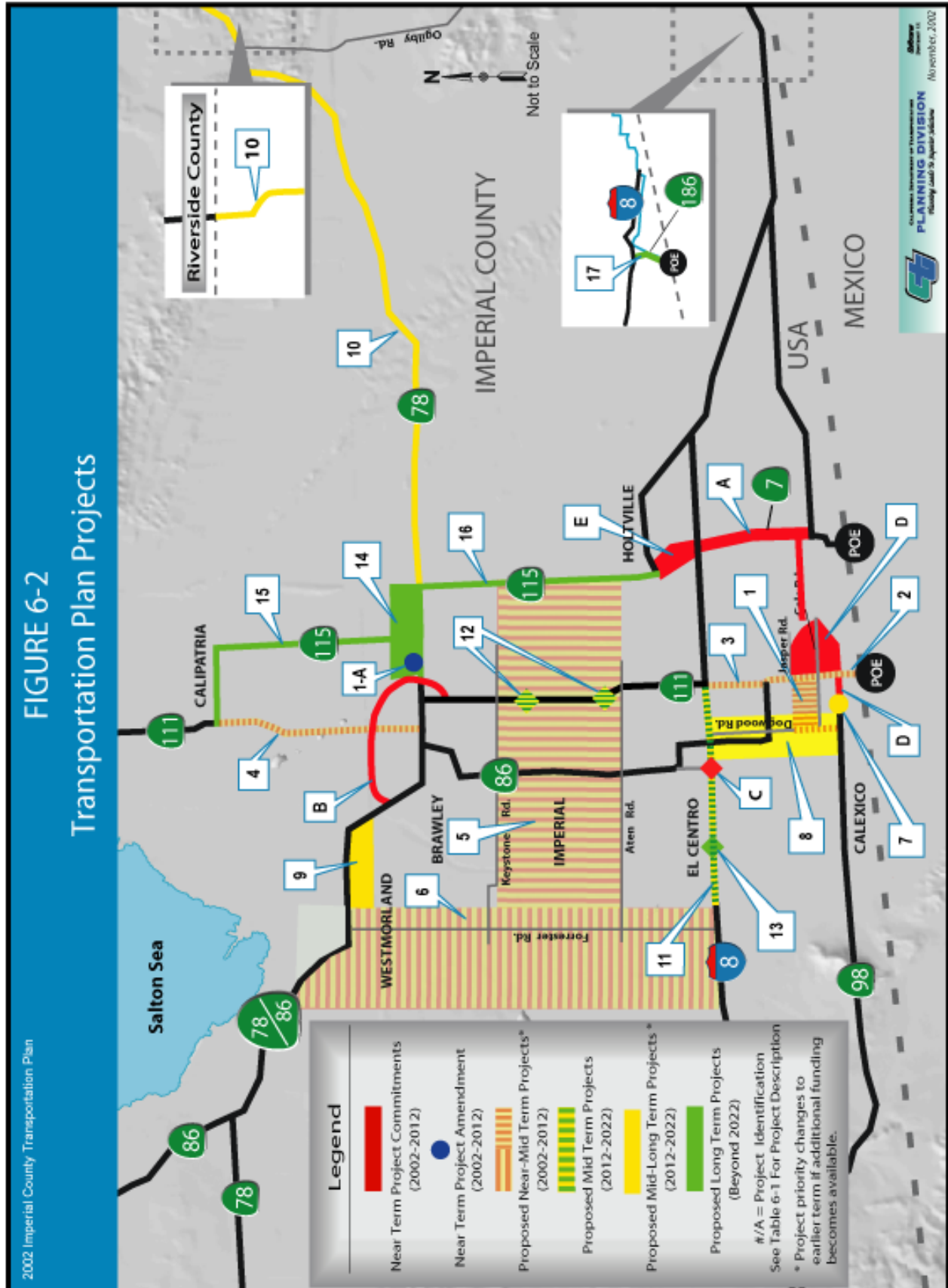
As these strategies and improvements are considered for funding, close attention and emphasis should also be considered for allocating possible funding for operational and safety improvements to the existing highway system and other off-system roadways that support the regional highway network. These are improvements that would provide

mobility and safety support to complement the regional highway system investment priorities laid out in this 2002 Transportation Plan. The 2002 Transportation Plan provides the region with a framework for developing transportation investment strategies that address future improvements to the regional highway network and other off-system improvements that will support deficiencies to the regional highway system.

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Appendix A

Technical Advisory Committee Member List

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IVAG 2002 Transportation Plan Technical Advisory Committee TAC					
AGENCY	NAME	ADDRESS	PHONE	FAX	EMAIL
1 Brawley	Francisco Soto	205 South Imperial Ave., Brawley CA 92227	760-344-8622	760-351-2656	Franciscosoto@yahoo.com
2	Mercedes Wheeler	205 South Imperial Ave., Brawley CA 92227	760-344-2360	760-351-2656	
3 Calexico	Mart Martinez	608 Heber Ave. Calexico CA 92231	760-768-2108	760-357-5864	calexicopwd@yahoo.com
4	Nick Fenely	608 Heber Ave. Calexico CA 92231	760-768-2108	760-768-0992	nfenely@calexico.ca.gov
5 Calipatria	Jesse Soriano	125 N. Park Ave Calipatria CA 92281	760-348-4141	760-348-7035	sorianojess@hotmail.com
6	Lee Vasquez	125 N. Park Ave Calipatria CA 92281	760-348-4141	760-348-7035	
7 El Centro	Steve Hogan	1275 Main Street El Centro CA 92243	760-337-4505	760-337-4564	shogan@cityof elcentro.org
8	Allen Tyler	1225 W Main Street El Centro CA 92243	760-352-2611	760-337-8428	elcentromail@tylerhart.com
9 Holtville	Gerald Peacher	121 W. 5th Street Holtville CA 92250	760-356-2632	760-356-1863	Gpeacher@holtville.ca.gov
10	Pete Mellinger	629 Maple Ave Holtville CA 92250	760-356-2912	760-356-1863	hltvcity@icoe.k12.ca.us
11 Imperial	Vincent Long III	420 S. Imperial Ave. Imperial CA 92251	760-355-4371	760-355-4718	cmsecy@ivcsnet.net
12	John Lay	420 S. Imperial Ave. Imperial CA 92251	760-355-3807	760-355-4718	Financedirector@cityofimperial.org
13 Westmorland	Joel Hamby	P.O. Box 699 Westmorland CA 92281	760-344-3411	760-344-5307	hambo@earthlink.net
14		P.O. Box 699 Westmorland CA 92281			
15 County of Imperial	Timothy B. Jones - CHAIR	155 S. 11th Street El Centro CA 92243			
16	S. Harry Orfanos	206 Rosemont Calexico, CA 92231	760-357-2795		
17 IID	Michael Trump	P.O. Box 937 Imperial CA 92251	760-339-9012	760-339-9140	msrump@iid.com
18	Paul Peschel	P.O. Box 937 Imperial CA 92251	760-339-9254	760-339-9016	pgpeschel@iid.com
20 BLM	Arnold Schoeck	1661 S. 4th Street El Centro, CA 92243	760-337-4441		arnold_schoeck@ca.blm.gov
23 Border Patrol	Richard F. Lopez	1111 N. Imperial Ave. El Centro, CA 92243	760-353-0541	760-353-6617	Richard.F.Lopez@usdoj.gov
29 Trucking Industry	Robert E. Ham	COLAB of Imperial County	760-312-9808	760-312-9806	bobham1@earthlink.net
30 Transit	K.C. Kennedy	P.O. Box 1828 El Centro, CA 92244	760-337-8002	760-352-3269	kennedy@arciv.org
X SCAG	Arnold San Miguel	3600 Lime Street Suite 216 Riverside CA 92501	909-784-3526	909-784-3925	sanmiguel@scag.ca.gov

IVAG 2002 Transportation Plan Technical Advisory Committee TAC						
AGENCY	NAME	ADDRESS	PHONE	FAX	EMAIL	
X SCAG	Michael Ainsworth	3600 Lime Street Suite 216 Riverside CA 92501	909-784-1513	909-784-3925	ainswort@scag.ca.gov	
X CALTRANS	Alex Estrella	1450 Frazee Rd. MS 50 San Diego, CA 92186	619-688-6806	619-688-2598	Alex_Estrella@dot.ca.gov	
X CALTRANS	Mark Baza	1450 Frazee Rd. MS 50 San Diego, CA 92186	619-688-2505	619-688-2598	Mark_Baza@dot.ca.gov	
X CALTRANS	Gene Pound	1450 Frazee Rd. MS 50 San Diego, CA 92186	619-688-6681	619-688-2598	Gene.Pound@dot.ca.gov	

Appendix B

Acronyms and Level of Service Definitions

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Transportation Acronyms

ADT	Average Daily Traffic
APCDE	Air Pollution Control District
ATSD	Advanced Transportation System Development
ASA	Aeropuertos y Servicios Auxiliares (Federal Agency responsible for the operations and maintenance of Mexican public airports)
AVI	Automatic Vehicle Identification
CALTRANS	California Department of Transportation
CABIN	Comision de Avaluos de Bienes Nacionales (Mexican Counterpart of GSA)
CBI	Coordinated Border Infrastructure
CMAQ	Congestion Mitigation and Air Quality
CVT	California Transportation Ventures (Private company responsible for the construct of SR 125)
CVEF	Commercial Vehicle Enforcement Facility
DOR	Division of Rail
DOT	Department of Transportation
DSMP	District Systems Management Plan
EA	Environmental Assessment
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FNM	Ferrocarriles Nacionales de Mexico (Federal Agency responsible for all railroad facilities and services in Mexico)
FTA	Federal Transit Administration
FTZ	Foreign Trade Zone
FY	Fiscal Year
GATT	General Agreement of Tariffs and Trade
GSA	General Services Administration
HOV	High Occupancy Vehicles
HR	House Report (Congressional Record)
IBTC	International Border Trade Corridor
ICES	Intermodal Corridor of Economic Significance
ICT	Imperial County Transit
ICTP	Imperial County Transportation Plan
IDD	Imperial Irrigation District
INEGI	Instituto Nacional De Estadistica Geografia E Informatica (Mexican Agency responsible for integrating Mexico's system of statistical and geographic information)
INS	Immigration and Naturalization Service
IRRS	Interregional Road System

ISTEA	Intermodal Surface Transportation Efficiency Act
ITS	Intelligent Transportation System
IVAG	Imperial County Association of Governments
JWC	Joint Working Committee
LTF	Local Transportation Fund
LOS	Level of Service
LROP	Long Range Operations Plan
LRT	Light Rail Transit
MPO	Metropolitan Planning Organization
MSL	Maintenance Service Level
MTDB	Metropolitan Transit Development Board
NAFTA	North American Free Trade Agreement
NAS	Naval Air Station
NHS	National Highway Systems
PA	Principal Arterial
PHV	Peak Hour Volume
P.M.	Post Mile
POE	Port of Entry
PS&E	Plans Specifications and Estimates
RCR	Route Concept Report
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
R/W	Right of Way
SAHOPE	Secretaria de Asentamientos Humanos y Obras Publicas del Estado de Baja California (Agency responsible for regional land use and transportation planning in the state of Baja California, Mexico)
SANDAG	San Diego Association of Governments
SAT	Servicio de Administracion Tributaria (Mexican Agency equivalent to Customs Inspection Agency)
SBSCIP	Southwest Border Station Capital Improvement Program
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCT	Secretaria de Comunicaciones y Transportes (Mexican Counterpart of FHWA)
SD&AE	San Diego and Arizona Eastern Railway
SD&IV	San Diego and Imperial Valley Railroad
SDUPD	San Diego Unified Port District
SEDAB	Southeast Desert Air Basin
SENTRI	Secure Electronic Network For Travelers Rapid Inspection
SHELL	Subsystem of Highways for the Movement of Extralegal Permit Loads
SHOPP	State Highway Operations Pavement Program
SP	Southern Pacific Railroad (merged with Union Pacific)
SPA	Specific Plan Area
SR	State Route

STA	State Transit Assistance
STAA	Surface Transportation Assistance Act
STP	Surface Transportation Program
STIP	State Transportation Improvement Program
TASAS	Traffic Accident Surveillance and Analysis System
TCM	Transportation Control Measure
TCR	Transportation Concept Report
TCRP	Transportation Congestion Relieve Program
TDM	Transportation Demand Management
TMA	Transportation Management Association
TEA	Transportation Enhancement Activities
TEA 21	Transportation Equity Act for the 21st Century
TOC	Transportation Operations Center
TP&D	Transportation Planning and Development
TPPS	Transportation Project Prioritization Study (CVAG)
TSM	Transportation System Management
USGAO	United States General Accounting Office
V/C	Volume to Capacity
VMT	Vehicle kilometers (miles) of Travel

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Level of Service Definitions

Level of Service (LOS) Definitions

The concept of LOS is defined as a qualitative measure describing operational conditions within a traffic stream, and the motorist's and/or passengers' perception of operations. A LOS definition generally describes these conditions in terms of such factors as speed, travel time, freedom to maneuver, comfort, convenience, and safety. Levels of service for freeway segments can generally be categorized as follows:

LOS	V/C	Congestion/Delay	Traffic Description
Used for surface streets, freeways, expressways and conventional highways.			
"A"	<0.41	None	Free Flow
"B"	0.42-0.62	None	Free to stable flow, light to moderate volumes.
"C"	0.63-0.80	None to minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted.
"D"	0.81-0.92	Minimal to substantial	Approaches unstable flow, heavy volumes, and very limited freedom to maneuver.
"E"	0.93-1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor.
Used for surface streets and conventional highways.			
"F"	>1.00	Considerable	Forced or breakdown flow. Delay measured in average travel speed (MPH). Signalized segments experience delays > 60.0 seconds/vehicles.

Source: Caltrans, 1992.

**Imperial County Standard Street Classification
Average Daily Vehicle Trips**

Road Class	Level of Service					
	X- Section**	A	B	C	D	E
Prime Arterial	106/126	22,200	37,000	44,600	50,000	57,000
Major Arterial	82/102	14,800	24,700	29,600	33,400	37,000
Secondary Arterial	64/84	13,700	22,800	27,400	30,800	34,200
Collector Street	40/70	1,900	4,100	7,100	10,900	16,200
Local Street	40/60	*	*	4,500	*	*
Residential	40/60	*	*	1,500	*	*

*Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

**First number is paved section (feet) and second number is right-of-way section (feet).

Source: Callexico/Mexicali Border Transportation Study, 2000.

Appendix C

Budget Estimates

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Financial Projections/Estimates Estimated revenues in million dollars)										
Underlying Sources	1997-2000	2001-2005	2006-2010	2011-2015	2016-2020	2021-2025	Totals			
Local Sources										
DA	12,900,000	12,400,000	11,800,000	11,200,000	10,700,000	8,000,000				
Local Sales Tax	28,300,000	27,300,000	20,900,000	-	-	-				
Freight	1,000,000	1,200,000	1,000,000	900,000	800,000	600,000				
Local Agency Funds	-	-	-	-	-	-				
Intergovernmental	-	-	-	-	-	-				
Subtotal	42,200,000	40,900,000	33,700,000	12,100,000	11,500,000	8,600,000	149,000,000			
State Sources										
TIP - Regional	37,500,000	41,200,000	28,600,000	25,600,000	23,400,000	16,400,000	172,700,000			
TIP- Interregional	80,700,000	48,400,000	6,700,000	6,000,000	5,500,000	3,900,000	151,200,000			
CRP	-	6,800,000	1,200,000	-	-	-				
State Sources	900,000	900,000	800,000	700,000	700,000	500,000				
CI/Prop 116	900,000	-	-	-	-	-				
HOPPO&M	54,500,000	39,800,000	49,500,000	44,300,000	40,500,000	28,300,000				
Subtotal	174,500,000	137,100,000	86,800,000	76,600,000	70,100,000	49,100,000	594,200,000			
Federal										
STP	4,600,000	4,600,000	4,100,000	3,800,000	3,500,000	2,600,000				
MAQ	-	-	-	-	-	-				
Local Assistance	1,900,000	2,200,000	2,000,000	1,900,000	1,700,000	1,300,000				
Sec. 5309	-	-	-	-	-	-				
Sec. 5307	500,000	600,000	600,000	600,000	600,000	400,000				
Subtotal	7,000,000	7,400,000	6,700,000	6,300,000	5,800,000	4,300,000	37,500,000			
TOTAL	223,700,000	185,400,000	127,200,000	95,000,000	87,400,000	62,000,000	780,700,000			
Revenue Breakdown	Revenue Totals	STIP Only Revenues								
OTAL 97-2025	780,700,000	323,900,000								
Ass 1997-2000	223,700,000	118,200,000								
otal 2001-2025	557,000,000	205,700,000								
Estimated										
Estimated Revenues per Year	23,208,333	8,570,833								

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Appendix D

Public Workshop Participants and Summary of Public Input

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Public Workshops – October 2001 Attendance List

Name	Organization / Company	Address	City	State	Zip Code
Sal Ramirez	IV ROP	1398 Sperber Rd.	El Centro	CA	
Milee Donohue	Native American	PO BOX 141		CA	
Larry Grogan	City of El Centro			CA	
Pete Mellinger	City of Holtville			CA	
Analilia Barraza	KUBO Radio	531 Main St. #2	El Centro	CA	
Robertta Burns	County of Imperial			CA	
Allen Tyler	El Centro	1225 Main St.		CA	
Jim Minnick	Imperial County Planning Department	939 Main St.	El Centro	CA	
Max Castillo	Castillo Construction Company	P.O. Box 233		CA	
Tim Jones	Imperial County Public Works	155 S. 11th St.		CA	
Tony Leon	Brawley Union High School	480 N. Imperial		CA	
Cindy Brittain	City of Brawley Parks and Recreation	225 A St.		CA	
Olivia Rios	City of Brawley	225 A St.		CA	
D. Lang	Calipatria Inn	700 N. Soreusou		CA	
Jo Shields	City of Brawley	420 W. Main St.		CA	
John Benson	City of Brawley	426 W. O		CA	
Arnold San Miguel	SCAG	3600 Lime St. Ste. 216	Riverside	CA	92501
Gilbert Grijalva	City of Calexico			CA	
Luis Caihe	Calexico Ti System			CA	
John Castuo	Kennedy Transit			CA	
Jose B.	City of Calexico			CA	
Muhaul Nood	City of Calexico			CA	
Shawn Rizzutto	Caltrans			CA	
Mariano Martinez	City of Calexico			CA	
Linda Barrientes	Linda Real Estates			CA	

Public Workshops – October 2001

Summary of Public Input

The first workshop was conducted in the City of Brawley on October 2, 2001 the City of Calexico on October 3, 2001, and the City of El Centro on October 4, 2001. The three-hour workshops allowed attendees to review work efforts completed by the TAC, gather information, and discuss their ideas of transportation needs and priorities through an “open house” format. More than two dozen members of the public participated in the workshops. Comments and input from the workshops are summarized as follows. For purposes of this Transportation Plan – Highway Element application, the findings are separated by highway and non-highway related comments.

Highway Related Project Improvement Comments

Project Description	Summarized Comments
Comments On New Projects	
• Evan Hewes Corridor	Consider Evan Hewes from El Centro to Holtville – Address East-West Traffic?
• New North South Corridor West of S33	Provide Connection from SR 98 to Proposed New Regional Freight Airport.
• SR-78 Improvements	Upgrade and widen roadway north-east section of SR 78 to Blythe/to I-10.
Comments Supporting TAC Project List	
<ul style="list-style-type: none"> • New North South Corridor (SR-78 to I-8) • SR-98 Widening to 4 lanes and bridge structure improvements @ RRxing • SR-111 – Interchange Improvements (Several Locations) • SR-98 Widening – Current Partially Programmed Project 	These projects should be priority for the region.
• New North-South Corridor – SR-98 to POE Improvements	Project(s) should be considered in future improvements.
• SR-115 – Widen to 4 lane expressway	Project should be considered as near term priority.
• New East-West Corridor	Possible alignment considerations – Worthington Road from Forrester Road to East Highline Road at Holtville Airport.
• SR-115 – Construct 4 lane extension	Project should be considered in future improvements.

Non-Highway Related Project Improvement Comments

Project Description	Summarized Comments
Transit Related Comments	
• County Wide	Increase Transit Service for elderly and disabled
Rail Related Comments	
• Improve Regional Rail Roads by 2025	Provide connections to San Diego, Yuma, L.A., Calipatria area, and Mexicali Airport,
• Bullet Train by 2050	Provide connections to San Diego alternatives to I-8 and I-10 corridors
Bicycle Facilities Related Comments	
• Add Class I Bicycle Facilities at several locations	New POE to Holtville along New SR 7, Holtville to SR-78 along SR-115, and New POE to Barbara Worth Rd. Along Carr Rd.
Operational Comments	
• SR-86 and SR-78	Provide sidewalk improvements along SR-86/78 corner to I Street
• SR-86	Improve Truck Restriction Signs between SR 86 and Cattle Call Dr.
• SR-86	Improve Turning Lane from Julia Dr to NB SR 86.
• SR-86	Improve Median Stripe west of Brawley
• SR-78	Improve Median Stripe and clarify maintenance responsibility
Other Comments	
• SR-86	Positive endorsement on SR 86 improvements – northern segment
• Ocotillo and Plaster City	Why are improvements considered in El Centro and not eastern communities of Ocotillo and Plaster City
• McConnell and Keystone Road	Possible alternatives – good set back for utilities, and key to farm movements
• New Regional Freight Airport	Use existing Holtville Airfield

Public Workshops – May 2002 Attendance List

Name	Organization / Company	Address	City	State	Zip Code
Rick Alloway		2626 Pearl Rd.		CA	
Leonard J. Vasquez	City of Calipatria	152 Welder Street		CA	
Alex Salazar	Brawley Inn	575 W. Main St.	Brawley	CA	
Holly Widmann	Calipatria Chamber		Calipatria	CA	92233
George Widmann	Del Yermo RV Park	263 E. Alamo	Calipatria	CA	92233
Maureen Rigley		P.O. Box 333 186 Beverlee Way	Westmorland	CA	
Denny Lang	Calipatria Inn	780 N. Sorensen			
Charlotte Lang	Calimart Express	500 N. Sorensen			
Joe Rigley		P.O. Box 333	Westmorland		
Francisco Soto	City of Brawley	205 S. Imperial Ave.			
Wally Leimgruber	Imperial County Board of Supervisors	940 W. Main Street	El Centro		
Mary Jo Shields	City of Brawley	420 W. Main Street	Brawley		
LeaAnne Waltz-O'Malley	City of Calipatria	220 W. Fern	Calipatria		
Jerry Santillan	City of Brawley	400 Main Street	Brawley		
Sal Ramirez	IV ROP	1398 Sperber Road			
Carolina Ramirez	IVC	380 E. Aten Road			
Eugene Dahm		4304 Forrester Rd.	Brawley		
Dorothy Dahn		4304 Forrester Rd.	Brawley		
Thomas Baker	City of Calipatria	P.O. Box 1672	Calipatria		92233
Tim Kelly	Brawley EDC	P.O. Box 218	Brawley	CA	
Pete Mellinger	City of Holtville	121 W. Fifth Street	Holtville	CA	
Arnold San Miguel	SCAG	3600 Lime St. Ste 206	Riverside	CA	92501
Abdel Salem	City of El Centro	1275 Main Street	El Centro	CA	92243
Bob Ham	County of Imperial	940 Main Street	El Centro	CA	92243

Public Workshops – May 2002 Attendance List (continued)

Name	Organization / Company	Address	City	State	Zip Code
John Pierre Menvielle	Menvielle Farms	897 West Ross Road	El Centro	CA	92243
Tony P. Tirado	Imperial County Board of Supervisors	416 2 nd Street	Calexico	CA	
Max Castillo	Castillo Construction	P.O. Box 233	Imperial	CA	92251
Arnold Schoeck	BLM				
Ophelia Ylurralde					
Barbara Rood		Jasper Road			
Roy Rood		Jasper Road			
Mart Martinez	City of Calexico	608 Heber Avenue	Calexico	CA	
Blanca Lopez	Casa Blanca Real Estate	2401 Portico Blvd.			
UNREADABLE	Garlan's	130 East 2 nd Street	Calexico	CA	
David Esquer	Lorenz Insurance Agency	919 Imperial Avenue			
Arturo Selwick	Planning Commission	101 Rockwood	Calexico	CA	
Julia Osuna	City of Calexico	608 Heber Avenue	Calexico	CA	
Gil Prestwood	McMillin Homes	444 South Eighth Street	El Centro	CA	
Jim Neujahr	Calexico Police	420 East Fifth Street	Calexico	CA	
Ralph Morales	City of Calexico	608 Heber Avenue	Calexico	CA	
Josie B. Felix	City of Calexico	608 Heber Avenue	Calexico	CA	
Luis Arridgo	Baja Export				
Cecilia Maldonado	KQVO-FM97.7	P.O. Box 232	Calexico	CA	92232
Mark Vasquez	City of Calexico	608 Heber Avenue	Calexico	CA	92232
David Sim	Donut Avenue	1018 Imperial Avenue	Calexico	CA	92232
Jose Carlos Romero	Nolte Associates	444 South 8 th Street	El Centro	CA	92232
Luis J. Gaito	Calexico Transit	452 Clark Street			
George M. Woo	Citigroup Calexico Chamber				

Public Workshops – May 2002

Summary of Public Input

Three public workshops were conducted throughout the County to gather input and comments to the final project list as approved by the Technical Advisory Committee. The first workshop was conducted in the City of Brawley on May 28th, followed by the City of El Centro on May 29th, and concluding with the City of Calexico on May 30th. The three-hour workshops allowed attendees to review and provide comments to the final project list through an “open house” format. Comments and input from the workshops are summarized in the following attachments for your information.

Summarized Comments	Comment Type 20-Year Plan/General	Notes
Insure that SR-98 and SR-7 projects are maintained as immediate improvements.	20 Year Plan - Project A - Project D	Projects are considered Near Term Project Commitments.
Remove dips and curves along SR-78 to Riverside County Line.	20 Year Plan - Project 10	Improvements are considered in project list as Mid Term category.
Forrester Road corridor improvement – alignment should follow west of Westmorland.	20 Year Plan - Project 6	No specific alignment is proposed in the Plan. Detail analysis and project description/definition is expected to be undertaken during the required project development process.
Consider additional funding sources to fund immediate needs.	20 Year Plan - All Projects	Comment noted
Extend SR-111 improvements north of Calipatria to Sinclair Rd.	20 Year Plan - Project 4	Comment noted
Brawley Bypass – • Ensure access from SR-111 for travel to Calipatria • Alignment should follow Andre Rd.	General	Project comment forwarded to Caltrans Project Manager.
Improve route signage at SR-86/SR-111 junctions	General	Comments forwarded to Caltrans Traffic Operations Division.
Improve SR-86 and Kalin Rd. exit to Cody Rd.	General	Comments forwarded to Caltrans Traffic Operations Division.
Place speed limit signs on SR-111 (outside Calipatria City limits)	General	Comments forwarded to Caltrans Traffic Operations Division.
Improve signage along I-10, SR-86, and SR-111 for travel to Niland and Calipatria.	General	Comments forwarded to Caltrans District 8.
There is a need for a traffic signal at Cole Rd./SR-98.	General	Comments forwarded to Caltrans Traffic Operations Division.
The Plan priorities must address the future growth of Calexico, Imperial Valley, and Mexicali.	20 Year Plan - All Projects	Comment noted.

Final Report Comments

#	Agency/Contact	Summarized Comment	Comment Type	Note
1	SCAG – Mr. IKHRATA	<p>Financial Assumptions –</p> <ol style="list-style-type: none"> 1) Delineate funding revenues associated with operations/maintenance 2) Plan should also address regional arterials 	Chapter 4 Financial Assumptions	<p>Comments Noted –</p> <ol style="list-style-type: none"> 1) Financial assumptions based on capital related cost/revenues 2) At the direction of TAC the 2002 Plan focuses on Imperial County's Highway System and Key Regional Corridors. The 1999 Imperial County Arterial Plan and other related documents provided background information and data for this plan. Caltrans will support and work in cooperation with IVAG, Imperial County, and local cities to develop subsequent Plan elements including a Regional Arterial Component
2	SCAG – Mr. IKHRATA	<p>Near Term Project Commitments Description/ID Corrections</p> <ul style="list-style-type: none"> ■ I-8/Imperial Avenue Interchange Improvements 	General	Comments Noted –
3	Private Citizen	General – Transit Service Issue	General	Comment Noted – Comment will be forwarded to Corresponding Service Provider

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Appendix E

Technical Advisory Committee Project Matrices

		Informational Emphasis Areas					Measurable Emphasis Areas			
		Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Area 8	Area 9
		Project Cost ¹ (Millions)	Plan or Program Status ² (RTP, STIP, other Plans or Programs)	Environmental and Physical Constraints	Social and Community Equity	Consistent with Local Transportation, Community, and Land Use Priorities	Existing Facility Conditions – ADT and Level of Service	Future Facility Conditions – ADT and Level of Service Estimated LOS with (<i>bold</i>) and without (<i>italics</i>) project improvements	Existing Traffic Accident Rate ³	Benefit Regional and/or International Goods Movement ⁴
Near Term Project Commitments w/Programmed Funds										
A	SR-7 – Construct 4 lane expressway- SR-98 to I-8	\$ 64.3 total cost \$64.3 programmed	In 1997 Plan In STIP	EIR Identified – surface runoff, irrigation, geological, farmland, air quality, and, right of way concerns Approval of Negative Declaration expected in 05/03	EIR Identified – limited to visual, and relocation concerns	Yes	ADT: N/A New Facility	ADT :41,000–43,000 LOS: C	N/A New Facility	Regional - High International - High
C	I-8 - Imperial Avenue Improvements	\$23.0 total cost \$7.50 programmed	In STIP PSR Completed Entered Co-op Agreement w/ El Centro	Approval of Negative Declaration expected in 05/03	Approval of Negative Declaration expected in 05/03	Yes	ADT:16,000 LOS: D	ADT: 24,000 LOS: C, E	EB – 0.92 WB – 0.64	Regional - Medium International - Medium
D	SR-98 Corridor Improvements • Widening and/or Realignment • Widening SR-111 and signals	\$90 total cost \$12.5 programmed	In 1997 Plan PSR Completed In STIP	Value Analysis Report Identified – noise, historical, hazardous material removal, farmland, and right of way concerns	Value Analysis Report Identified – local and regional traffic would be mixed, and community concerns	Yes	ADT: 10,000 to 20,000 LOS: C to D	ADT:23,000-41,000 LOS: E, F	1.96 through 2.77	Regional - High International – High
		\$9.0 total cost \$2.0 programmed	Environmental Phase Underway							
B	Brawley Bypass SR-78/111	\$108.0 total cost \$90.0 programmed	In 1990 Plan In 1997 Plan In STIP Draft EIR Completed	EIR Identified – farmland, species, agricultural drain habitat, wetlands, and some hazardous waste concerns	EIR Identified – business access, visual character for isolated residences north of City	Yes	ADT: 6,000-25,000 LOS: B to C	ADT: 7,000-22,000 LOS: C, F	1.61 through 6.04	Regional – High International – High
E	SR-115 – Construct 4 lane extension –I-8 to Evan Hewes	\$ 48.0 - \$55.0 11/2001 Estimate \$32.0	In 1997 Plan PSR Completed	Project Study Report Identified – farmland, irrigation, hazardous material/waste, biological, wetlands, and right of way concerns • Classified as Categorically Exempt	Project Study Report Identified – reduced business traffic, and accessibility concerns • Classified as Categorically Exempt	Yes	ADT/Existing Roadways: 1,000 – 6,500 LOS: B	ADT:15,000-20,000 LOS: C, D	N/A New Facility	Regional – High International – High
Near Term Project Amendment										
I-A	SR-78 Access Improvements (Proposed SDSU Campus in Brawley)	\$0.25 - \$3.0	New Proposal	Detail Analysis Needed	Detail Analysis Needed	Yes	ADT: 3,100 LOS: B	ADT: 6,800 LOS: B	0.68	Regional – Medium International – Low

Additional Proposed Projects										
		\$ 1.5	In 1997 Plan	Detail Analysis Needed	Detail Analysis Needed	Yes	ADT:20,000 LOS B through F	ADT: 36,000 to 44,000 LOS: C, F	2.77	Regional – High International – High
7	SR 98 – Bridge structure improvements at railroad									
1	SR 98 Corridor Improvements Widening and/or Realignment SR-111 to Dogwood	Estimated \$15.0 per mile	Environmental Phase Underway	Value Analysis Report Identified – noise, historical, hazardous material removal, farmland, and right of way concerns	Value Analysis Report Identified – local and regional traffic would be mixed, and community concerns	Yes	ADT:20,000 LOS: C to D	ADT: 36,000 to 44,000 LOS: E, F	2.77	Regional – High International – High
2	SR-111 improvements south of SR-98 to POE	From \$1.9 – \$48.4 Study Report Estimates	Identified under Calexico/Mexicali Study, 2000	Study Identified – possible air quality, noise, visual, and right of way concerns	Study Identified – Identified – business traffic accessibility concerns	Yes	ADT: 30,000 – 37,000 LOS: D to E	ADT: 54,000 to 80,00 LOS: D, F	3.81	Regional – High International – High
3	SR-111 – Improve to 4 lane Freeway with interchange(s) at several locations – SR-98 to I-8	\$ 90.0	In 1997 Plan	Detail Analysis Needed	Detail Analysis Needed	Yes	ADT: 12,000 – 29,000 LOS: B	ADT: 71,000 – 87,000 LOS: D, F	1.22	Regional – High International – High
4	SR-111 – Upgrade to 4 lane Conventional (Brawley to Calipatria) SR-78 to SR-115	Estimated \$15.0 per mile	In 1997 Plan	Likely Concerns as identified in Brawley Bypass EIR and Detail Analysis Needed	Likely Concerns as identified in Brawley Bypass EIR and Detail Analysis Needed	Yes	ADT: 10,000-15,000 LOS: D	ADT: 15,000-18,000 LOS: C, D	Actual – 2.79 Segment C of EIR	Regional – Low International – Low
8	New North-South Corridor west of SR-111 – SR-98 to I-8	Estimated \$15.0 per mile	New Proposal	Detail Analysis Needed	Detail Analysis Needed	Yes	N/A New Facility	ADT: 42,000-52,000 LOS: D, F	N/A New Facility	Regional – High International – High
5	New East-West Corridor - Aten Rd. to Keystone Corridor	Estimated \$15.0 per mile	New Proposal	Detail Analysis Needed	Detail Analysis Needed	Yes	Aten Rd. ADT: 5,500-6,400	ADT: 23,000-26,000 LOS: C, D	N/A New Facility	Regional – High International – Medium
6	New North-South Corridor – Forrester Rd. Corridor (SR-78 to I-8)	Estimated \$15.0 per mile	In 1997 Plan SCAG RTP*	Detail Analysis Needed	Detail Analysis Needed	Yes	Forrester Rd. ADT: 6,000-7,000	ADT: 13,000 LOS: B, C	N/A New Facility	Regional – High International – High
9	Westmorland Bypass (4 lane Expressway)	\$ 60.0 to \$80.0	In 1997 Plan SCAG RTP*	Detail Analysis Needed	Detail Analysis Needed	Yes	N/A New Facility	ADT:18,000 – 20,000 LOS: B, C	N/A New Facility	Regional – Medium International – Medium
13	I-8 – Austin Rd. Interchange	Estimated \$24.0	New Proposal	Detail Analysis Needed	Detail Analysis Needed	Yes	N/A New Facility	ADT: 24,000 – 30,000 LOS: C, E	N/A New Facility	Regional – Low International – Low
11	I-8 - Widening to 6 lanes – SR-111 to New North-South Corridor	Estimated \$15.0 per mile	New Proposal	Detail Analysis Needed	Detail Analysis Needed	Yes	ADT: 29,000 LOS: A	ADT: 56,000-71,000 LOS: C, D	0.33	Regional – Medium International – Medium
10	SR-78 Improvements SR-115 to Riverside County Line	Estimated \$5.0 per mile	New Proposal	Detail Analysis Needed	Detail Analysis Needed	Yes	ADT: 1,700 LOS: B	ADT: 4,000 LOS: B	0.59 – Ogilby Rd. to Milpitas Wash Rd.	Regional – Medium International – Low
12	SR-111 – Interchange Improvements between SR-78 and I-8	\$ 60.0	In 1997 Plan	No significant effects anticipated refer to – Finding of No Significant Impact (FONSI Report, 1997)	No significant effects anticipated refer to – Finding of No Significant Impact of FONSI Report	Yes	ADT: 7,000-10,000 LOS: B	ADT: 45,000-55,000 LOS: D, E	Actual 1.29 Per 1997 FONSI Report	Regional – High International – High
14	SR-115 – Construct new 4 lane Expressway – Brawley Bypass to SR-78	\$ 36.0	In 1997 Plan	Detail Analysis Needed	Detail Analysis Needed	Yes	ADT:2,000 LOS: B	ADT: 10,000 – 11,000 LOS: B, D	N/A New Facility	Regional – Medium International – Medium

15	SR-115 – Widen to 4 lane Expressway – SR-78 to SR-111	Estimated \$5.0 per mile	In 1997 Plan	Detail Analysis Needed	Yes	ADT:2,000 – 4,000 LOS: B	ADT: 7,000 – 8,000 LOS: B, C	0.85	Regional – Medium International – Medium
16	SR-115 – Widen to 4 lane Expressway- Evan Hewes to SR- 78	Estimated \$5.0 per mile	In 1997 Plan	Detail Analysis Needed	Yes	ADT:2,000 – 3,000 LOS: B	ADT:10,000 – 11,000 LOS: B, C	1.16	Regional – Medium International – Medium
17	SR-186 – Widen to 4 Conventional and/or Interchange improvement to I-8/SR-186	Estimated \$5.0 per mile	In 1997 Plan	Significant Environmental Impacts to sensitive lands and habitat – Per Environmental Assessment Report Conducted by GSA	Yes	ADT:2,000- 5,000 LOS: B	ADT: 10,000-14,000 LOS: C, D	1.44	Regional – Low International – Low

Notes:

This Matrix represents project evaluation findings for all projects and no priority is implied by order in which each project is presented. Project numbers only represent project IDs and are assigned to each project to match Project listings provided in Table 6-1.

1 – Project Costs for *Near-Term Project Commitments* are current total project costs as of 2002. Project Cost for *Proposed Projects To be Considered* are based on 1) 1997 cost estimates inflated to 2002 dollars using an annual inflation rate of 3.5 percent, or 2) order of magnitude based on preliminary estimates/cost per mile.

2 – Previous Plans or Programs can include, but not limited to: Identified in Imperial County’s Transportation Plan adopted by IVAG Board in February, 1997, or Currently Programmed in the 2002 State Transportation Improvement Program.

3 – Existing Traffic Accident Rates are based on 1) information from completed studies/reports, and or 2) data from Caltrans 2000 State Highway Inventory

4 - High Benefits – Priority International Trade and Regional Movement Corridor
Medium Benefits – Serves International Trade and Regional Movement
Low Benefits – Limited Service to International Trade and Regional Movement

*Identified in SCAG’s RTP as a Post 2025 Project.